Definitions of Historic Events for IntelliRupterR3

Table 1. Event Categories and Codes

Category Name	Category Code
DAT	1
BMS	2
DNP	3
LOG	4
SUM	5
DPX	6
DPR	7
RTD	8
BMM	9
IPM	10
CFM	11
ATX	12
IMS	13
IPM2	14
ACW	15
WFC	16
PNG	17
OCF	18
MSC	19
PRO	20
C2H	21
IIM	22
WFM	23
UTL	24
LRM	25
NET	27
EVT	30
RTL	31
SUP	32
ECM	33
GOS	34
PMU	35

Table 2. Types of Additional Data Items for Historic Events (357 items)

Data Type Name	Represented As	Type Information
AbnormalRestartCode	UINT16	Abnormal restart details: Enumeration Binary / Value / Descripion 1 / RestrtTooOft / Restarts occurs too frequently

		2 TSrcNoRTCGPS Time source is not RTC or GPS at abnormal restart 3 InvalidInitStatus Invalid Init Status
AbortReason	UINT16	**Enumeration** **Binary / Value / Descripion** 0 Init Init 1 IncorrectState Incorrect State 2 TripOnInit Trip on Init 3 ActuatorMov Actuator Moving 4 ActuatorErr Actuator Error 5 TripWhenOpen Trip When Open 7 NoRTCorGPSTim No RTC/GPS Time 8 NoSleepTime No Sleep Time 9 SEEPTimeout SEEP Timeout 10 InvalidFreq Invalid Frequency 11 NoEnabdProfl No enabled profile 12 CapBelow50Pct Capacity below 50% 13 OldProflCod Old Profile Coding 14 TestOpenError Test Open Error 15 LowEnrgyTOut Low Energy Timeout 16 LowEnrgyToOp Low Energy to Open 17 ShutdnSeqErr Shutdown Sequence Err 18 SwMisaligned Switch Misaligned 19 UnexpcIMSErr Unexpected IMS Error 20 OpenLeverError Open Lever Error 21 PoleOpnChkErr Pole Open Check Error
AccessDeniedReason	UINT16	**Enumeration** **Binary / Value / Descripion** 1 NoSession No Session 2 SessIDMismatch Session ID Mismatch 3 CredMismatch User Credentials Mismatch 4 NoValidAuthObj No Valid Authentication Object 5 InsuffRights Insufficient Access Rights 6 BadData Bad Data 7 RmtNotAllowed Remote Not Allowed 8 WiFiNotAllowed WiFi Not Allowed 9 BlockingClock Blocking Clock Running 10 MaxAttempts Max Access Attempts Exceeded
Action	UINT16	Action in action path. **Enumeration** **Binary / Value / Descripion** 4 ClsForXfer Close for xfer 20 CtrctReq Contract request 21 CtrctEnd Contract Terminate 30 BlockRecl Block recloser

		31 UnBlkRecl Unblock recloser 33 BlkGdTrip Block ground trip 34 UnblkGdTrip Unblock ground trip 36 AltSettings Alternate settings 37 Normal Normal 200 ActPathDone Action path done
ActiveURBEClassMask	UINT16	Bit mask - zero or more of the following OR-ed 0x02 - class 1 active 0x04 - class 2 active 0x08 - class 3 active **Enumeration** **Binary / Value / Descripion** 0 None No URBE 2 Cls1Active Class 1 active 4 Cls2Active Class 2 active 6 Cls12Active Class 1 and 2 active 8 Cls3Active Class 3 active 10 Cls13Active Class 1 and 3 active 12 Cls23Active Class 2 and 3 active 14 Cls123Active Class 1 and 2 and 3 active
Agent	UINT16	**Numeric Type, Range: 0-65535** **Action / Value** Multiplier 1 Adder 0
AngleDiff	UINT16	Phase angle difference in degrees **Numeric Type, Range: 0-360** **Action / Value** Multiplier 1 Adder 0
AnyPhaseLoss	UINT16	Pole X Phase Loss **Numeric Type, Range: 0-15** **Action / Value** Multiplier 1 Adder 0
Argument_1	UINT16	Argument_1 for DPR commands **Numeric Type, Range: 0-65535** **Action / Value** Multiplier 1 Adder 0
Argument_2	UINT16	Argument_2 for DPR commands **Numeric Type, Range: 0-65535** **Action / Value** Multiplier 1 Adder 0

<table>
<tr><td>Argument_3</td><td>UINT16</td><td>Argument_3 for DPR commands

<table><tr><th colspan="2">Numeric Type, Range: 0-65535</th></tr><tr><th>Action</th><th>Value</th></tr><tr><td>Multiplier</td><td>1</td></tr><tr><td>Adder</td><td>0</td></tr></table></td></tr>
<tr><td>Argument_4</td><td>UINT16</td><td>Argument_4 for DPR commands

<table><tr><th colspan="2">Numeric Type, Range: 0-65535</th></tr><tr><th>Action</th><th>Value</th></tr><tr><td>Multiplier</td><td>1</td></tr><tr><td>Adder</td><td>0</td></tr></table></td></tr>
<tr><td>ATXCmdRejectReason</td><td>UINT16</td><td><table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>1</td><td>IMSNotRdy</td><td>IMS Hardware is not ready</td></tr><tr><td>2</td><td>SPLNotAllowed</td><td>Single Pole Lockout is not allowed</td></tr><tr><td>3</td><td>Testing</td><td>Test Sequence is in progress</td></tr><tr><td>4</td><td>CPmissed</td><td>Required closing profile is not configured</td></tr><tr><td>5</td><td>PoleMismMode</td><td>The command is not allowed in pole mismatch state</td></tr><tr><td>6</td><td>HLTSet</td><td>Hot Line Tag is active</td></tr><tr><td>7</td><td>MechTest</td><td>Mech test operation is in progress</td></tr><tr><td>8</td><td>IMSNotIdle</td><td>IMS Operation in progress</td></tr><tr><td>9</td><td>WFCNotIdle</td><td>WFC subsystem is not idle</td></tr><tr><td>10</td><td>ControlIsIdle</td><td>Command can't be performed in the Idle State</td></tr><tr><td>11</td><td>BadGP</td><td>General Profile data corrupted or incorrect</td></tr><tr><td>12</td><td>OpenReceived</td><td>Open request overrided pending close</td></tr><tr><td>13</td><td>TstOpnDisabled</td><td>Test Open command is not allowed in this state</td></tr><tr><td>14</td><td>TstClsDisabled</td><td>Test Close or Test Pulse command is not allowed in this state</td></tr><tr><td>15</td><td>ClsProhibited</td><td>Close command is not allowed in current state</td></tr><tr><td>16</td><td>IllegalProfile</td><td>Communication-enhanced sequence shift is not allowed in active profile</td></tr><tr><td>17</td><td>IncorrectState</td><td>Communication-enhanced sequence shift is not allowed in this state</td></tr><tr><td>18</td><td>DirNotSpecifd</td><td>Communication-enhanced sequence shift direction is not defined</td></tr><tr><td>19</td><td>PolesNotOpen</td><td>All poles to be pulsed are not open</td></tr><tr><td>20</td><td>InsuffEnergy</td><td>No control energy available</td></tr><tr><td>21</td><td>PRONotIdle</td><td>Protection elements are timing</td></tr><tr><td>22</td><td>LkgCurErr</td><td>Leakage current check error</td></tr><tr><td>23</td><td>LkgCurErrBlk</td><td>Leakage current check error blocked operation</td></tr><tr><td>24</td><td>RjctMainMode</td><td>Reject Maintenance Mode</td></tr><tr><td>26</td><td>BadGOOSECmd</td><td>Bad GOOSE Command</td></tr><tr><td>27</td><td>DTTRejected</td><td>DTT Rejected</td></tr></table></td></tr>
<tr><td>ATXMode</td><td>UINT16</td><td><table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>0</td><td>ThreePh</td><td>Three-Phase</td></tr></table></td></tr>
</table>

		1 SnglPh Single-Phase Mode
ATXPLIInstanceType	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 ZeroSeqX Zero Sequence Terimnal X 1 NegSeqX Negative Sequence Terimnal X 2 ZeroSeqY Zero Sequence Terimnal Y 3 NegSeqY Negative Sequence Terimnal Y
ATXState	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 LockOpen Lock Open 2 Init Init 3 StateClsdIT State Closed IT 4 WaitTripOpen Wait Trip Open 5 FullyOpen Fully Open 6 OpeninTest Open in Test 7 OpDelayed Operation Delayed 8 Reclosing Reclosing 9 Pulsing Pulsing 10 WaitTestRslt Wait Test Result 11 CancelOp Cancel Op 12 WaitCancelOp Wait Cancel Op 13 ClosedInTest Closed in Test 14 PoleOpnCurrChk Pole Open Current Check 15 PulseClose Pulse Close 16 WtPlsClsRes Wait PulseClose Result 17 ClsdInClsdPf Closed in Closed Profile 18 WaitClosing Wait Closing 19 ReInit Reinitialization 20 ClsdInSqCord Closed in SeqCoord 21 DelayToClose Delay to Close 22 ExecClose Execute Close 23 SuspLowEnrgy Suspend-Low Energy 24 ReplacActPrf Replacing Active Prof 25 WaitTestOpen Wait TestOpen 26 WaitManOpen Wait Manual Open 27 WaitCurrentChk Wait Pole Open Current Check 28 Idle Idle 29 ShutDown ShutDown 30 Unpowered Unpowered 31 MaxCurExceeded Max Current Exceeded 50 SinglePhaseOp 1-phase Operations 51 SinglePhLockout 1-phase Lockout 52 EmergOpen Open while Closing 53 Exec1phOp Exec 1-phase test operation 54 SinglePhTest 1-ph Test Step

		100 ATXinError ATX in Error State
ATXTimer	UINT16	Enumeration Binary / Value / Descripion 1 TestSeq Test Sequence 2 SeqCoord Sequence Coordination 3 ClosingProf Closing Profile 4 PulseHold Pulse Hold 5 ManlClsDelay Manual Close Delay 6 GOOSE GOOSE
AverageLoad	UINT16	Averaged Load Numeric Type, Range: 0-65535 Action / Value Multiplier 1 Adder 0
BadSensorIndex	UINT16	Enumeration Binary / Value / Descripion 8 Unknown Unknown 9 XSide X Side 10 YSide Y Side 11 XandYSides X and Y Sides
BFIEStatus	UINT16	Enumeration Binary / Value / Description 0 UFFullyReset Under Freq Fully Reset 1 UFTiming Under Freq Timing 2 UFSuspended Under Freq Suspended 3 UFTripped Under Freq Tripped 4 UFRetToNorm Under Freq Return to Normal
BlockTrip	UINT16	Enumeration Binary / Value / Description 1 GroundTrip ground or negative trip blocked 2 SEFTrip SEF trip blocked
BMMOp	UINT16	Enumeration Binary / Value / Descripion 0 Read Read 1 Write Write 2 Scan Scan 3 Erase Erase 4 BuffRead Buff.Read 5 BuffWrite Buff.Write
BMMRecId	UINT16	Enumeration Binary / Value / Descripion 257 Calibr Calibr. 513 Signature Signature

		769 Mech Mech 1025 Settings Settings 1281 WiFiSign WiFi Sign 1537 WiFi WiFi 1793 NetList NetList 2049 CmdStatus Cmd Status
BMMRecStatus	UINT16	**Enumeration** **Binary / Value / Descripion** 0 Unknown Unknown 1 NotFound Not Found 2 Bad Bad 3 Old Old 4 Dup Dup 5 Ok Ok
BMMRESULT	UINT16	BMM RESULT **Enumeration** **Binary / Value / Descripion** 0 BMMRESSUCS BMM Result is Successful 1 BMMRESBADREQ BMM Result is bad 2 BMMRESBUSY BMM Result is busy 3 BMMRESBMMUNAVA BMM Result is unavailable 4 BMMRESBMMREADFAIL BMM Result failed to read 5 BMMRESBMMWRITEFAIL BMM Result failed to write 6 BMMRESRENMATCO BMM Result Read but not matching copy 7 BMMRESOVERFLOW BMM Result has overflowed 8 BMMRESBADRECORD BMM Result has a bad record 9 BMMRESNOFON BMM Result is not found
BMMSTATE	UINT16	BMM STATE **Enumeration** **Binary / Value / Descripion** 0 BMM_STATE_READY BMM is ready to process API calls 1 BMM_STATE_BUSY BMM is busy processig an API call or with maintenance 2 BMM_STATE_INIT BMM is initializing 3 BMMSTATNOTDETECTED BMM hardware is not accessible 4 BMM_STATE_ERROR A fatal run-time error encountered during operation
BooleanTrueFalse	UINT16	**Enumeration** **Binary / Value / Descripion** 0 false false 1 true true
bufsiz	UINT16	**Numeric Type, Range: 0-65535** **Action / Value**

		Multiplier: 1 Adder: 0
CalDataCRCStatus	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / CRCinvalid / CRC invalid 1 / CRCvalid / CRC valid
CallbackStatus	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / MsgRespSucc / Message response received successfully 1 / MsgNoResp / Message received no response 2 / MsgExpired / Message expired on the transmit list 3 / RespBadData / Message response data contained an error 4 / MsgNoPeerDev / Message had no associated peer device
CapBank	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / Main / Main 1 / Secondary / Secondary
CapVoltage	INT16	Capacitor voltage in Volts in Q6 **Numeric Type, Range: -512-512** **Action** / **Value** Multiplier / 0.015625 Adder / 0 **Presentation** **Binary** / ### V
CECCommand	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 / Back / Shift Back 2 / Forward / Shift Forward 3 / KeepActive / Keep Active
CECShift	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 / ShiftX / Shift X 2 / ShiftY / Shift Y 3 / ShiftBoth / Shift Both
CECUrgentShift	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 15105 / ShiftX / Shift X 15106 / ShiftY / Shift Y 15107 / ShiftBoth / Shift Both
ChangedDataObject	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 / stVal / stVal

		2 Quality Quality 3 TimeStamp TimeStamp 4 StartGeneral Start General 5 StartDirGeneral Start Dir General 6 StartQuality Start Quality 7 StartTimestamp Start Timestamp 8 OperateGeneral Operate General
ClearPRBlocker	UINT16	**Enumeration** **Binary / Value / Description** 0 MasterBlks Master Blocks 1 SetptBlks Setpoint Blocks
ClearPRonHLTRem	UINT16	**Enumeration** **Binary / Value / Description** 0 ClrPRonHLTRemDisab Disabled 1 ClrPRonHLTRemEnab Enabled 2 PRSetBySCADA PR Set By SCADA 3 PRSetByLocalCMD PR Set By Local CMD 4 PRSetByAUXInput PR Set By AUX Input 5 PRSetByStateMatch PR Set By State Match 6 PRSetByUnknown PR Set By Unknown
ClearSectFaultCommandArg	UINT16	**Enumeration** **Binary / Value / Description** 0 ClearFaultFlag ClearFaultFlag 1 ClearFltFlagAndCnt ClearFltFlagAndCnt
CLFValue	INT16	CLF value **Numeric Type, Range: 0-65535** **Action / Value** Multiplier 0.0002441 Adder 0
CloseCmdIgnoredReason	UINT16	**Enumeration** **Binary / Value / Description** 1 CloseInProgress Cls In Progress 2 ClosePending Close Pending 3 AlreadyClosed Already Closed 4 TrippedOrOpen Tripped Or Open 5 OpenLocked Open Locked
CloseIgnoredCmd	UINT16	**Enumeration** **Binary / Value / Description** 0 ATXInternalCmd ATX Internal Cmd 1 PartialCloseCmd Partial Cls Cmd 2 ThreePhClsCmd 3Phase Cls Cmd
ClosePolesCommandArg	UINT16	**Enumeration** **Binary / Value / Description**

		1 Pole1 Pole 1 2 Pole2 Pole 2 3 Poles12 Poles 1 and 2 4 Pole3 Pole 3 5 Poles13 Poles 1 and 3 6 Poles23 Poles 2 and 3 7 Poles123 Poles 1 and 2 and 3
ClosePrfCommandArg	UINT16	**Enumeration** **Binary Value Description** 0 Normal normal 1 First First 2 Second Second
CoachRejectionCode	UINT16	**Enumeration** **Binary Value Description** 1 Old Old 2 duplicate duplicate 3 CRCBad CRC bad
cold_loadRelayArg	UINT16	**Enumeration** **Binary Value Description** 0 X1 1 X2 2 X3 3 Y1 4 Y2 5 Y3
CommandArgument	UINT16	**Union** **Value DataType** SpecWFC SpecWFCCommandArg SpecExtWFC SpecExtWFCCommandArg GroundTrip GroundTripCommandArg Testing TestingCommandArg UseClosePrf UseClosePrfCommandArg DefProfile DefProfileCommandArg MechTest MechTestCommandArg OpenSrcSect OpenSrcSectCommandArg HotLineTag HotLineTagCommandArg TstBackfeed TstBackfeedCommandArg ReplacePrf ReplacePrfCommandArg SetPrf SetPrfCommandArg SetRmtOffAlert SetRemoteOffAlertCommandArg SetWIFI SetWIFICommandArg SetBatAlert SetBatAlertCommandArg ITIIReady ITIIReadyCommandArg SetClearErr SetClearErrCommandArg

		LoopsReady: LoopsReadyCommandArg SinglePhOper: SinglePhOperCommandArg InformMode: InformModeCommandArg CECShift: CECCommand GOOSEAction: GooseActionCommandArg ClearSectFault: ClearSectFaultCommandArg
CommandArgument2	UINT16	**Union** **Value** / **DataType** CLOSE: ClosePrfCommandArg CECShift: CECShift
CommandArgument3	UINT16	**Union** **Value** / **DataType** OpenPoles: OpenPolesCommandArg ClosePoles: ClosePolesCommandArg
CommandCode	UINT16	**Enumeration**

Binary	Value	Descripion
1	Restart	Restart
3	TimingRst	TimingRst
4	ApplyGblSPs	ApplyGblSPs
16	WFCEnbl	WFCEnbl
17	WFCStart	WFCStart
18	ResetCounters	ResetCounters
21	ClearStat	ClearStat
23	PNGClear	PNGClear
25	SpecWFC	SpecWFC
26	SpecExtWFC	SpecExtWFC
32	GroundTrip	GroundTrip
33	Testing	Testing
34	UseClosePrf	UseClosePrf
35	BlkSEFtrip	BlockSEFtrip
36	DefProfile	DefProfile
37	OPEN	OPEN
39	CLOSE	CLOSE
40	MechTest	MechTest
41	OpenSrcSect	OpenSrcSect
42	HotLineTag	HotLineTag
43	TstBackfeed	TstBackfeed
44	ReplacePrf	ReplacePrf
45	EnablePrf	EnablePrf
47	SetPrf	SetPrf
48	ElementEn	ElementEn
49	LoadLog	Load Log
50	ClearMan	Clear Man
51	SetRmtOffAlert	Set Remote Off Alert
52	ClrOCTripStatus	Clear O/C Trip Statuses

		53 SetWIFI Set WIFI 54 SetBatAlert Set Bat Alert 55 ITIIReady ITII Ready 56 ResetOC Reset OC 57 LoopsReady Loops Ready 58 SetClearErr SetClearErr 59 CECShift CEC Shift 60 ClearLatchOC Clear Latched OC 61 InformMode Inform Mode 62 ClearWarnings Clear Warnings 63 ClearAlarms Clear Alarms 64 OpenPoles Open Poles 65 ClosePoles Close Poles 66 SinglePhOper Block 1-phase Ops 67 ClrLeakCnt Clear Leakage Time Accum 68 ManLevrCls Manual Lever Close 69 ManLevrOpn Manual Lever Open 72 GOOSEAction GOOSE Action 73 ClearSectFault Clear Sectionalizing Fault 112 ATXRun ATX Run 113 ATXHold ATX Hold 114 FullStatusUpdate Full Status Update
CommandsFlush	UINT16	Counter of MCU commands have been flushed after DSP restart **Numeric Type, Range: 0-100** **Action** / **Value** Multiplier / 1 Adder / 0
CommErrorCode	UINT16	Communications error code **Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier / 1 Adder / 0
connectID	UINT16	Connection ID **Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier / 1 Adder / 0
ConnectionID	UINT16	ConnectionID **Enumeration** **Binary** / **Value** / **Descripion** 0 CIDUndefined CID Undefined 1 CIDGeneral CID General 2 CIDIInternalDNP CID IInternal DNP

3	CIDCoach	CID Coach
4	CIDRunner	CID Runner
5	CIDContractAgt	CID Contract Agent
6	CIDNetlistXfer	CID Netlist Xfer
7	CIDCoraAlleyOop	CID CoraAlley Oop
8	CIDIT2Events	CID IT2 Events
9	CIDProtection	CID Protection
10	CIDDATLoadMgmt	CID DAT Load Mgmt
11	CIDCECSignal	CID CEC Signal
12	CIDD1ag	CID Diag
13	CIDRemoteXmit	CID Remote Xmit
16	CIDNETObjMgmt	CID NET Object Mgmt
17	CIDNETRunner0	CID NET Runner 0
18	CIDNETRunner1	CID NET Runner 1
19	CIDNETRunner2	CID NET Runner 2
20	CIDNETRunner3	CID NET Runner 3
21	CIDNETRunner4	CID NET Runner 4
22	CIDNETRunner5	CID NET Runner 5
23	CIDNETRunner6	CID NET Runner 6
24	CIDNETRunner7	CID NET Runner 7
25	CIDNETRunner8	CID NET Runner 8
26	CIDNETRunner9	CID NET Runner 9
27	CIDNETRunner10	CID NET Runner 10
28	CIDNETRunner11	CID NET Runner 11
29	CIDNETRunner12	CID NET Runner 12
30	CIDNETRunner13	CID NET Runner 13
31	CIDNETRunner14	CID NET Runner 14
32	CIDNETRunner15	CID NET Runner 15

ContractState — UINT16 — Contract State.

Enumeration		
Binary	**Value**	**Descripion**
1	CActive	Contract state active
2	CReqPend	Contract state request pending
3	CReqUnsent	Contract state request unsent
4	CReqTrav	Contract state request traveling
5	CReqAccept	Contract state request accpected
6	CReqDecline	Contract state request declined
7	CReqDeclContd	Contract state request decline continuing
8	CDslveStart	Contract state dissolve start
9	CDslveContd	Contract state dissolve continue
10	CMaintStart	Contract state maintenance start
11	CMaintTickl	Contract state maintenance tickle
12	CMaintTrav	Contract state maintenance travel
13	CMTravNoFind	Contract state maintenance travel not found
14	CMTrRetNoFnd	Contract state maint travel return not found

		15 CMTicklNoFind Contract state maintenance tickle not found 16 CMTiRetNoFnd Contract state maint tickle return not found 17 CMaintReact Contract state maintenance reactivate contract 18 CMNoReact Contract state maint don't reactivate here - continue 19 CChk2ndFld Contract state request - check 2nd field
ControlCode	UINT16	Control Number **Numeric Type, Range: 0-15** Action: Value Multiplier: 1 Adder: 0
Core2Exceptions	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 FlashMemECCError Flash Memory ECC Error 2 IntlRAMECCParErr Internal RAM ECC_Parity Error 4 Core2BadInstruct Core2 Illegal Ins 8 Core2HeartbeatStop Core2 Heartbeat Stopped
Core2Health	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 Healthy Healthy 2 InitFail Init Fail 3 CatastrophicErr Catastrophic Core2 Error 5 MissedHeartBeat Missed HeartBeat 6 PendingReset Pending Reset
CurrentCycle	UINT16	Current position of the sequential file to be written **Numeric Type, Range: 0-65535** Action: Value Multiplier: 1 Adder: 0
CurrentDirection	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 XtoY X->Y 2 YtoX Y->X
CycleNumber	UINT16	Cycle number **Numeric Type, Range: 0-65535** Action: Value Multiplier: 1 Adder: 0
DataLength	UINT16	Length of the data **Numeric Type, Range: 0-65535** Action: Value Multiplier: 1 Adder: 0

<table>
<tr><td>DataReadStatus</td><td>UINT16</td><td><table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>0</td><td>DataReadGood</td><td>Data Read Good</td></tr><tr><td>1</td><td>DataReadError</td><td>Data Read Error</td></tr></table></td></tr>
<tr><td>DATARNR</td><td>UINT16</td><td>Data runnes working within the time limits

<table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>1</td><td>NETXDATRNR</td><td>Runners are working within timeouts when set</td></tr></table></td></tr>
<tr><td>dctsiz</td><td>UINT16</td><td>Data Length

<table><tr><th colspan="2">Numeric Type, Range: 0-65535</th></tr><tr><th>Action</th><th>Value</th></tr><tr><td>Multiplier</td><td>1</td></tr><tr><td>Adder</td><td>0</td></tr></table></td></tr>
<tr><td>DEauxData</td><td>UINT16</td><td>Aux Data

<table><tr><th colspan="2">Numeric Type, Range: 0-65535</th></tr><tr><th>Action</th><th>Value</th></tr><tr><td>Multiplier</td><td>1</td></tr><tr><td>Adder</td><td>0</td></tr></table><table><tr><th colspan="2">Presentation</th></tr><tr><td>Binary</td><td>{0:X2}</td></tr></table></td></tr>
<tr><td>DefProfileCommandArg</td><td>UINT16</td><td><table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>1</td><td>Normal</td><td>Normal</td></tr><tr><td>2</td><td>Alternate</td><td>Alternate</td></tr></table></td></tr>
<tr><td>DestinationIndex</td><td>UINT16</td><td>Destination Index

<table><tr><th colspan="2">Numeric Type, Range: 0-65535</th></tr><tr><th>Action</th><th>Value</th></tr><tr><td>Multiplier</td><td>1</td></tr><tr><td>Adder</td><td>0</td></tr></table></td></tr>
<tr><td>DestNodeID</td><td>UINT16</td><td>NET Destination Node ID

<table><tr><th colspan="2">Numeric Type, Range: 0-65535</th></tr><tr><th>Action</th><th>Value</th></tr><tr><td>Multiplier</td><td>1</td></tr><tr><td>Adder</td><td>0</td></tr></table></td></tr>
<tr><td>DetailSummary</td><td>UINT16</td><td><table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>0</td><td>Error</td><td>Error</td></tr><tr><td>1</td><td>Detail</td><td>Detail</td></tr><tr><td>2</td><td>Summary</td><td>Summary</td></tr></table></td></tr>
<tr><td>DETerm</td><td>UINT16</td><td><table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr></table></td></tr>
</table>

		0 None No Term 1 TermX Term X 2 TermY Term Y 3 BothTerm Both Term
dev	UINT16	Device Type, either a substation or not a substation **Numeric Type, Range: 0-65535** Action: Value Multiplier: 1 Adder: 0
DeviceIndex	UINT16	local device number of the FN Runner Source Device **Numeric Type, Range: 0-65535** Action: Value Multiplier: 1 Adder: 0
DeviceNumber	UINT16	Working runner source list in the Runner Source Control **Numeric Type, Range: 0-65535** Action: Value Multiplier: 1 Adder: 0
DeviceWirepairs	UINT16	Number of Device-Wire pairs from prep function **Numeric Type, Range: 0-65535** Action: Value Multiplier: 1 Adder: 0
DiagTestType	UINT16	Type of diagnostic test **Enumeration** Binary: Value: Descripion 0 Scheduled Scheduled 1 Quick Quick
Direction	UINT16	**Enumeration** Binary: Value: Descripion 1 Forward Forward 2 Reverse Reverse
DivBy10	UINT16	Divide by 10 **Numeric Type, Range: 0-65535** Action: Value Multiplier: 0.1 Adder: 0
DNPAddress	UINT16	Values represented in hexadecimal code **Numeric Type, Range: 1-65519**

		Action / **Value** Multiplier / 1 Adder / 0 **Presentation** **Binary** / **{0:X2}**
DNPAppControl	UINT16	DNP application control byte **Numeric Type, Range: 0-255** **Action** / **Value** Multiplier / 1 Adder / 0
DNPAppFunctionCode	UINT16	DNP Application Function Code **Numeric Type, Range: 0-255** **Action** / **Value** Multiplier / 1 Adder / 0
DNPDLAction	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 / RecReinit / record reinit 2 / ResetSeqOnly / reset seq num only 3 / NewPeer / new peer added
DNPObjectType	UINT16	DNP Object Type **Numeric Type, Range: 0-255** **Action** / **Value** Multiplier / 1 Adder / 0
DNPObjectVariation	UINT16	DNP Object Variation **Numeric Type, Range: 0-255** **Action** / **Value** Multiplier / 1 Adder / 0
DNPOutputBlockStatusCode	UINT16	DNP Output Block Status Code **Numeric Type, Range: 0-255** **Action** / **Value** Multiplier / 1 Adder / 0
DNPPointCode	UINT16	Internal DNP point code **Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier / 1 Adder / 0
DNPPointType	UINT16	**Enumeration**

		Binary / **Value** / **Description** 1 / Binary / binary 2 / Analog / analog 3 / Counter / counter
DNPTranspFunctionCode	UINT16	DNP transport function code **Numeric Type, Range: 0-255** **Action** / **Value** Multiplier / 1 Adder / 0
DNPTransportHeader	UINT16	DNP transport header byte **Numeric Type, Range: 0-255** **Action** / **Value** Multiplier / 1 Adder / 0
DPRError	UINT16	**Enumeration** **Binary** / **Value** / **Description** 1 / SeqNum / Seq Num 2 / BufferFull / Buffer Full
DriverValue	UINT16	**Union** **Value** / **DataType** OvVolt / DriverValueGeneric UndVolt / DriverValueGeneric OvFreq / DriverValueGeneric UndFreq / DriverValueGeneric ColdLoad / DriverValueGeneric OvCurr / DriverValueGeneric SyncChk / DriverValueGeneric GoodSrc / DriverValueGeneric PhLoss / DriverValueGeneric SEFCntr / DriverValueGeneric ROCOF / DriverValueGenericSigned
DriverValueCurrent	UINT16	A **Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier / 1 Adder / 0
DriverValueFrequency	INT16	Hz **Numeric Type, Range: -32768-32767** **Action** / **Value** Multiplier / 0.001953125 Adder / 0
DriverValueGeneric	UINT16	This type is a union of DriverValueCurrent and DriverValueVoltage and DriverValueFrequency

<table>
<tr><td></td><td></td><td>
<table>
<tr><th colspan="2">Numeric Type, Range: 0-65535</th></tr>
<tr><th>Action</th><th>Value</th></tr>
<tr><td>Multiplier</td><td>1</td></tr>
<tr><td>Adder</td><td>0</td></tr>
</table>
</td></tr>
<tr><td>DriverValueGenericSigned</td><td>INT16</td><td>This type is a union of DriverValueCurrent and DriverValueVoltage and DriverValueFrequency, signed for ROCOF

<table>
<tr><th colspan="2">Numeric Type, Range: -32768-32767</th></tr>
<tr><th>Action</th><th>Value</th></tr>
<tr><td>Multiplier</td><td>1</td></tr>
<tr><td>Adder</td><td>0</td></tr>
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</td></tr>
<tr><td>DriverValueVoltage</td><td>UINT16</td><td>V

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<tr><th colspan="2">Numeric Type, Range: 0-65535</th></tr>
<tr><th>Action</th><th>Value</th></tr>
<tr><td>Multiplier</td><td>1</td></tr>
<tr><td>Adder</td><td>0</td></tr>
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</td></tr>
<tr><td>DSPTimeSource</td><td>UINT16</td><td>
<table>
<tr><th colspan="3">Enumeration</th></tr>
<tr><th>Binary</th><th>Value</th><th>Descripion</th></tr>
<tr><td>0</td><td>IntlDSPOsc</td><td>internal DSP oscillator</td></tr>
<tr><td>1</td><td>MCUintlOsc</td><td>MCU internal oscillator</td></tr>
<tr><td>2</td><td>MCURTC</td><td>MCU RTC</td></tr>
<tr><td>3</td><td>MCUGPS</td><td>MCU GPS</td></tr>
<tr><td>4</td><td>IEEE1588</td><td>IEEE-1588</td></tr>
</table>
</td></tr>
<tr><td>ECCMemoryError</td><td>UINT16</td><td>
<table>
<tr><th colspan="3">Enumeration</th></tr>
<tr><th>Binary</th><th>Value</th><th>Descripion</th></tr>
<tr><td>1</td><td>Warning</td><td>Warning</td></tr>
<tr><td>2</td><td>Severe</td><td>Severe</td></tr>
</table>
</td></tr>
<tr><td>ECMFatalError</td><td>UINT16</td><td>
<table>
<tr><th colspan="3">Enumeration</th></tr>
<tr><th>Binary</th><th>Value</th><th>Descripion</th></tr>
<tr><td>1</td><td>IllegalState</td><td>Illegal State</td></tr>
<tr><td>2</td><td>IPCInit</td><td>IPC Init</td></tr>
<tr><td>3</td><td>IPCDeinit</td><td>IPC Deinit</td></tr>
<tr><td>4</td><td>WiFiStateSnd</td><td>WiFi State Send</td></tr>
<tr><td>5</td><td>DataRetrveSnd</td><td>Data Retrieve Send</td></tr>
<tr><td>6</td><td>ACKSend</td><td>ACK Send</td></tr>
<tr><td>7</td><td>FatalCallback</td><td>Fatal Callback</td></tr>
</table>
</td></tr>
<tr><td>ElemDisabedByDE</td><td>UINT16</td><td>
<table>
<tr><th colspan="3">Enumeration</th></tr>
<tr><th>Binary</th><th>Value</th><th>Descripion</th></tr>
<tr><td>0</td><td>Pole1TermX</td><td>Pole1TermX</td></tr>
<tr><td>1</td><td>Pole2TermX</td><td>Pole2TermX</td></tr>
<tr><td>2</td><td>Pole3TermX</td><td>based on phase torques</td></tr>
<tr><td>3</td><td>GrndTermX</td><td>phase points to Y, no pick up</td></tr>
<tr><td>4</td><td>NegTermX</td><td>based on phase torques</td></tr>
</table>
</td></tr>
</table>

		5 SEFTermX neg. points to X, no pick up 6 Pole1TermY Pole1TermX 7 Pole2TermY Pole2TermX 8 Pole3TermY based on phase torques 9 GrndTermY phase points to Y, no pick up 10 NegTermY based on phase torques 11 SEFTermY neg. points to X, no pick up 12 Pole1XIFS Pole1TermX 13 Pole2XIFS Pole2TermX 14 Pole3XIFS based on phase torques 15 GrndXIFS phase points to Y, no pick up 18 Pole1YIFS Pole1TermX 19 Pole2YIFS Pole2TermX 20 Pole3YIFS based on phase torques 21 GrndYIFS phase points to Y, no pick up
EnabledDisabled	UINT16	**Enumeration** **Binary** **Value** **Descripion** 0 Disabled Disabled 1 Enabled Enabled
EncoderReading	INT16	Encoder Reading **Numeric Type, Range: -500-500** **Action** **Value** Multiplier 1 Adder 0
EntryPointDevice	UINT16	Indication that this control is the Entry Point Device **Numeric Type, Range: 0-65535** **Action** **Value** Multiplier 1 Adder 0
EOSErrorCode	UINT16	EOS Error Code for the CF operations **Numeric Type, Range: 0-256** **Action** **Value** Multiplier 1 Adder 0
ErrorCode	UINT16	Error Code for the CF operations **Numeric Type, Range: 0-256** **Action** **Value** Multiplier 1 Adder 0
ErrorCodeNETX	UINT16	Error code for the Netx system **Enumeration** **Binary** **Value** **Descripion**

		0 NETX_SUCCESS Netx is successful 1 NETX_NO_NETVW Netx has no Net view 2 NETX_NO_RTU No RTU was found for NETX 3 NETX_BAD_NETVW Netx has a bad Net view 4 NETX_OBJ_FAIL Netx object has failed 5 NETX_FAIL Netx has failed 6 NETX_OBJ_QUED Netx object has been qued 7 NETX_NOT_RSD Netx has not RSD 8 NETX_BAD_CRC Netx has a bad CRC 9 NETX_NOTACTV Netx is not active 10 NETX_NOT_FOUND Netx is not found 11 NETX_OUT_OF_MEM Netx is out of memory 256 NETXDUPLCHACKCAP Netx duplicate hack capacity
EvtBoolean	UINT16	**Enumeration** **Binary / Value / Descripion** 0 false false 1 true true
ExcessLoad	UINT16	**Enumeration** **Binary / Value / Descripion** 0 ExcessLoad Excess Load
ExpressNetViewRow	UINT16	Number of entries in row, one for device,one for wire **Numeric Type, Range: 0-65535** **Action / Value** Multiplier 1 Adder 0
ExtCommandArgument1	UINT16	**Union** **Value / DataType** MaintMode MaintModeState GTBCommand GTBState HLT HLTState
ExtCommandArgument2	UINT16	**Union** **Value / DataType** Close ProfileNumber
ExtCommandArgument3	UINT16	**Union** **Value / DataType** HLT HLTSrc
ExtCommandCode	UINT16	**Enumeration** **Binary / Value / Descripion** 170 MaintMode MaintMode 245 Trip Trip 37 Open Open 39 Close Close 32 GTBCommand GTBCommand

		42 HLT HLT
ExternalOutput	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 122 Open Open 123 Closed Closed 124 HLT HotLineTag 125 GTB GdTripBlock 126 MMode MaintMode
ExtTripCommand	UINT16	**Union** **Value** / **DataType** Open PoleStatus Closed PoleStatus HLT HLTSource GTB GTBSource MMode MMode
FeederNetCRC	UINT16	CRC of this Feeder Net **Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier 1 Adder 0
FeederNetID	UINT16	Feeder Net ID **Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier 1 Adder 0
FeederNetIndex	UINT16	Feeder Net Index **Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier 1 Adder 0
FeederNetObjectFlags	UINT16	Incoming Feeder Net Flages from ITD **Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier 1 Adder 0
FeederNetObjType	UINT16	Type of netlist distribution **Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier 1 Adder 0
FixQuality	UINT16	**Enumeration**

		Binary / **Value** / **Descripion** 0 / NoSignal / No Signal 1 / GPS / GPS 2 / DGPS / DGPS 3 / PPS / PPS 4 / RealTmKinematic / Real Time Kinematic 5 / FloatRTK / Float RTK 6 / Estimated / Estimated 7 / MnlInputMode / Manual Input Mode 8 / SimulatMode / Simulation Mode
FreqTrip	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / NoTrip / No Trip 1 / FreqTrip / Freq Trip 2 / NA / Not Applicable 255 / NotProgrammed / Not Programmed
FreqTripType	UINT16	Over Under Freq. Trip **Numeric Type, Range: 1-2** **Action** / **Value** Multiplier / 1 Adder / 0
good_sourceRelayArg	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / TermX / TermX 1 / TermY / TermY 2 / TermXY / TermXY
GooseActionCommandArg	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 / Shift / Shift 2 / Unshift / Unshift 3 / DirTransTrip / DTT
GooseCommLossReason	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / Unknown / Unknown 1 / Quality / Quality 2 / NoSubscriptionRcvd / No Subscription Received
GooseConfigFile	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / Unknown / Unknown 1 / GOOSEICD / GOOSE ICD 2 / GOOSEActionLogic / GOOSE Action Logic 3 / GOOSECombined / GOOSE Combined
GooseConfigInvalid	UINT16	**Enumeration**

		Binary / **Value** / **Descripion** 0 / Unknown / Unknown 1 / NotFound / Not Found 2 / NoSubs / No Subscriptions 3 / TooManySubs / Too Many Subscriptions 4 / NoPubs / No Publications 5 / TooManyPubs / Too Many Publications 6 / BadOrMissingMACID / Bad Or Missing MAC ID 7 / InvalidLogic / Invalid Logic 8 / StorageError / Storage Error 9 / RetrievalError / Retrieval Error
GooseDeactivationSource	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / Unknown / Unknown 1 / License / License 2 / Configuration / Configuration 3 / Enable / Enable
GooseEventReason	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / Unknown / Unknown 1 / MandStatus / Mandatory Status 2 / Quality / Quality 3 / MSAndQuality / MS And Quality
GPSStatus	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / TimePosOK / Time Position OK 1 / TPosOKPendStab / Time Position OK Pending Stability 2 / TPosOKNoPulse / Time Position OK No Pulse Signal 3 / TimePosInvalid / Time Position Invalid 4 / DInvalidSLineOdd / Data Invalid Serial Line Anomaly 5 / DInvalidSLineErr / Data Invalid Serial Line Error 6 / DInvalidSLineSil / Data Invalid Serial Line Silence 7 / DisabledByUser / Disabled By User 255 / NotInitialized / Not Initialized
GroundTripCommandArg	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 / Enabled / Enabled 2 / Blocked / Blocked
GTBSource	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / NoGTB / GTBNotSet 1 / CMD / Command 2 / Lever / Lever 4 / ExtTripDev / ExtTripDev

		255 Unknown NoOutput
GTBState	UINT16	Enumeration Binary / Value / Descripion 2 / ON / ON 1 / OFF / OFF
HealingType	UINT16	Enumeration Binary / Value / Descripion 1 / ITII / IT-II 2 / RSH / RSH
Hexushort	UINT16	Values represented in hexadecimal code Numeric Type, Range: 0-65535 Action / Value Multiplier / 1 Adder / 0 Presentation Binary / {0:X2}
HLT	UINT16	Enumeration Binary / Value / Descripion 0 / HLTInactive / HLT Inactive 1 / HLTActive / HLT Active
HLTSource	UINT16	Enumeration Binary / Value / Descripion 0 / NoHLT / HLTNotSet 1 / Lever / Lever 2 / SCADA / SCADA 4 / WIFI / ILinkWIFI 8 / ExtTripDev / ExtTripDev 255 / Unknown / NoOutput
HLTSrc	UINT16	Enumeration Binary / Value / Descripion 6 / AllButLever / All Except Lever
HLTState	UINT16	Enumeration Binary / Value / Descripion 1 / ON / ON 2 / OFF / OFF
HotLineTagCommandArg	UINT16	Enumeration Binary / Value / Descripion 1 / Enabled / Enabled 2 / Disabled / Disabled
ifs_coordRelayArg	UINT16	Enumeration Binary / Value / Descripion 1 / TermX / TermX

		2 TermY TermY 3 TermXY TermXY
IMSCmdCode	UINT16	**Enumeration** **Binary / Value / Descripion** 0 NoCommand 1 Open1 2 Open3 3 Close1 4 Close3 5 Pulse1 6 PulseClose1 7 PulseClose3 8 ManualOpen 9 Open2 10 Close2 11 PulseClose2
IMScompletion	UINT16	**Enumeration** **Binary / Value / Descripion** 0 OpenComplete Open operation complete 1 CloseComplete Close operation complete 2 Error Operation complete with error 3 EmgOpen Emergency open when close complete 4 CurrentCheck Open current check complete 5 CmdPulseChkCmplt Cmd Pulse Check Complete
IMSIncidentName	UINT16	**Enumeration** **Binary / Value / Descripion** 0 MainCoilCurnt Main Coil Current 1 ClosePosition Close Position 2 PosIncorrect Position Incorrect 3 EncoderProblem Encoder Problem 4 EncoderNoReset Encoder No Reset 5 NoContactTouch No Contact Touch 6 PulsePOWRange Pulse POW out of Range 7 ClosePOWRange Close POW out of Range 8 Secondary Secondary Not Moving 9 ClosePOWfRgeAlm Close POW out of Range Alarm 10 PulsePOWRgeAlm Pulse POW out of Range Alarm 11 GapTimeTooHigh Gap Time Too High 12 LowClsOpenTime Low Close Open Time 13 LowAvgClsOpnTim Low Average Close Open Time 14 ExcessOverTrav Excessive Over Travel 15 ProfIncorrect Profile Incorrect 16 ExcessiveBounce Excessive Bounce 17 OpenCurrentTest Open Current Test 18 ContactWearLow Remaining Contact Wear Low

		20 | OperationState | IMS Operation State
IMSPriState	UINT16	**Enumeration** **Binary** | **Value** | **Description** 0 | Unknown | Unknown 1 | Closed | Closed 2 | Opening | Opening 4 | OpnSetl | OpnSetl 8 | Open | Open 16 | DlyClose | DlyClose 32 | DrvClose | DrvClose 64 | ClsSetl | ClsSetl
IMSRetCode	UINT16	**Enumeration** **Binary** | **Value** | **Description** 101 | InsuffEnergy | Insufficient Energy 102 | OpInProgress | Op In Progress 103 | Cannotpulse | Cannot pulse 104 | CannotOper | Cannot Operate
INCNUMTEAM	UINT16	FEEDERNET incoming team array number of teams **Numeric Type, Range: 0-65535** **Action** | **Value** Multiplier | 1 Adder | 0
IndexMngTable	UINT16	Find this node in the NLTA arrays **Numeric Type, Range: 0-65535** **Action** | **Value** Multiplier | 1 Adder | 0
InformModeCommandArg	UINT16	**Enumeration** **Binary** | **Value** | **Description** 0 | Off | Off 1 | On | On
Instance	UINT16	Instance: The value is used for debugging purposes and does not yield any benefit **Numeric Type, Range: 0-65535** **Action** | **Value** Multiplier | 1 Adder | 0
InternalCode	UINT16	Internal code for troubleshooting. **Enumeration** **Binary** | **Value** | **Description** 1 | CCircRsrcOK | Contract circuit resources are adequate 2 | CLineSegReqHi | Contract line segment request above limit 3 | CLoadCapReqHi | Contract load capacity request above limit

		4 | SrcSubSwVloss | SourceSub Switch has detected voltage loss
InternalCode2	UINT16	Internal event-specific code **Numeric Type, Range: 0-65535** **Action** | **Value** Multiplier | 1 Adder | 0
IntTempSensor	UINT16	**Enumeration** **Binary** | **Value** | **Descripion** 1 | Sensor1 | Sensor 1 2 | Sensor2 | Sensor 2
IPMState	UINT16	**Enumeration** **Binary** | **Value** | **Descripion** 0 | Charge | CHARGE 1 | Discharge | DISCHARGE 2 | Operation | OPERATON 3 | FullCharge | FULLCHARGE 4 | NoPower | NO POWER 255 | Undefined | UNDEF
IRPosition	UINT16	**Enumeration** **Binary** | **Value** | **Descripion** 0 | Unknown | Unknown 1 | Closed | Closed 2 | Open | Open 3 | Pulsed | Pulsed 4 | Misaligned | Misaligned 5 | MechError | Mechanism Error
ITIIReadyCommandArg	UINT16	**Enumeration** **Binary** | **Value** | **Descripion** 0 | ITIINotRdy | not ready 1 | ITIIReady | ready
ITIssueCode	UINT16	Return to initial trip settings issue code **Enumeration** **Binary** | **Value** | **Descripion** 0 | NoIssue | No Issue 1 | OCTiming | There are timed OC elements 2 | MiscTiming | There are timed voltage/frequency elements 3 | OCTrip | OC element trip 4 | MiscTrip | Voltage or frequency element trip
LeakageCurrent	INT16	Leackage Current in amps **Numeric Type, Range: 0-1000** **Action** | **Value** Multiplier | 1

		Adder: 0 Presentation: Binary: #### A
LeakageTrigger	UINT16	Enumeration Binary: 1, Value: x1, Description: 1x Binary: 4, Value: x4, Description: 4x
LineSegLimit	UINT16	Enumeration Binary: 0, Value: LineSegLimit, Description: Line Seg Limit
LoadingCurrent	UINT16	1 amperes per count Numeric Type, Range: 0-655350 Action: Multiplier, Value: 1 Action: Adder, Value: 0
LOGDiagType	UINT16	Enumeration Binary: 1, Value: Alarm, Description: Alarm Binary: 2, Value: Warning, Description: Warning Binary: 4, Value: Error, Description: Error
LookupTblGenCode	UINT16	Enumeration Binary: 0, Value: OK, Description: OK Binary: 1, Value: CoeffALimit, Description: Coefficient A Limit Binary: 2, Value: CoeffBLimit, Description: Coefficient B Limit Binary: 3, Value: CoeffCLimit, Description: Coefficient C Limit Binary: 4, Value: CoeffDLimit, Description: Coefficient D Limit
LoopsReadyCommandArg	UINT16	Enumeration Binary: 0, Value: LoopsNotRdy, Description: not ready Binary: 1, Value: LoopsReady, Description: ready
MaintModeState	UINT16	Enumeration Binary: 105, Value: ON, Description: ON Binary: 104, Value: OFF, Description: OFF
ManOpClrReject	UINT16	Enumeration Binary: 1, Value: DisconnOpen, Description: Disconn Open Binary: 2, Value: OpenLocked, Description: Open Locked
ManualOp	UINT16	Enumeration Binary: 0, Value: ManOpInactive, Description: Man Op Inactive

		1 ManOpActive Man Op Active
MapNumber	UINT16	Enumeration Binary / Value / Descripion 0 BinaryInput binary input 1 AnalogInput analog input 2 Counter counter 3 Control control 4 AnalogOutput analog output 5 DblBinaryInput double binary output
MaskofDisabledElements	UINT16	Mask of Disabled Elements Numeric Type, Range: 0-65535 Action / Value Multiplier 1 Adder 0
Master	UINT16	Enumeration Binary / Value / Descripion 1 Master1 Master 1 2 Master2 Master 2 3 Master3 Master 3 4 Master4 Master 4 5 Master5 Master 5 6 Master6 Master 6 255 NoMaster No Master
MasterRecAddError	UINT16	Enumeration Binary / Value / Descripion 0 Good good 1 Error error 2 AlrdyInList already in list 3 ListFull list full 4 NotOnList not on list
MaxPeersWhen	UINT16	Max Peers Occur During This Enumeration Binary / Value / Descripion 0 WhenTestInit WhenTestInit 1 WhenTestStats WhenTestStats
MCUProfile	UINT16	Enumeration Binary / Value / Descripion 0 GenProf1 General Profile 1 1 GenProf2 General Profile 2 2 GenProf3 General Profile 3 3 GenProf4 General Profile 4 4 ClosProf1 Closing Profile 1 5 ClosProf2 Closing Profile 2

		6 HLTProfile HLT Profile
MechTestCommandArg	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 PulseClose PulseClose 2 Close Close 3 Open Open 7 PulseRepulse PulseRepulse 8 ThreePoleSimulCls ThreePoleSimulClose
MemberWithDoneAndEOL	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 Member1 Member 1 2 Member2 Member 2 3 Member3 Member 3 4 Member4 Member 4 5 Member5 Member 5 6 Member6 Member 6 7 Member7 Member 7 8 Member8 Member 8 254 EndofList EndofList 256 Done Done
miscRelayIndex	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 Pole1Over Pole 1 overvoltage 1 Pole2Over Pole 2 overvoltage 2 Pole3Over Pole 3 overvoltage 3 ZSOver Zero Seq 4 NSOver Neg Seq 9 ThreePhOver Three-Phase overvoltage 5 Pole1Uv Pole 1 undervoltage 6 Pole2Uv Pole 2 undervoltage 7 Pole3Uv Pole 3 undervoltage 8 NoSource No Source 10 ThreePhUv Three-Phase undervoltage 11 OverFreq Over Frequency 12 UnderFreq Under Frequency 13 Sect Sectionalizer 14 WattmetricX Wattmetric_X 15 WattmetricY Wattmetric_Y 16 DTAPX DTAP_X 17 DTAPY DTAP_Y
MMode	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 NotSet NotSet 1 MaintMode MaintMode

		8 Error Error 255 Unknown NoOutput
MoreThanOneDiffFound	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / OneDiffFound / Only OneDiff Found 1 / TwoOrMoreDiffs / Two Or More Diffs
netfragID	UINT16	Net Fragment ID **Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier / 1 Adder / 0
NETLISTRNR	UINT16	Number of NETLIST runners in RunnerSource **Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier / 1 Adder / 0
netobuffFree	UINT16	Cumulative free buffer space **Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier / 1 Adder / 0
NETSTE	UINT16	Net state E **Enumeration** **Binary** / **Value** / **Descripion** 1 / BACKIDLE / Go back to idle 8 / RESENDRNR / Go re-send the runner objects since some failed 4 / WAITRT / Go wait for returns
NetViewAnalyzer	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / NETVIEWNOTVALID / Net view is not valid 2 / NETVIEWVALID / Net view is valid
NETViewLength	UINT16	The Normal State NetView Length of each row table **Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier / 1 Adder / 0
NetViewRowNum	UINT16	Runner source row number in nnet **Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier / 1

		Adder: 0
NETVSRC	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 / NETVSRC_NORMAL / NETV source is normal 2 / NETVSRC_ALTERNATE / NETV source is alternate 3 / NETVFDR_NOTNORMAL / NETV source is not normal 255 / NETVSRC_UNDEFINED / NETV source is undefined
NodeCount	UINT16	Number of appearnaces in this runner **Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier: 1 Adder: 0
NodeIndex	UINT16	Our position in the Node Index table **Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier: 1 Adder: 0
Nodelists	UINT16	Runner node lists **Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier: 1 Adder: 0
NoMaster	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / MasterExists / MasterExists 1 / NoMaster / No Master
NoPeersWhen	UINT16	Max Peers Occur During This **Enumeration** **Binary** / **Value** / **Descripion** 0 / SchedTest / SchedTest 1 / QuickTest / QuickTest 2 / KeepAlive / KeepAlive 3 / KwikKeepAlive / KwikKeepAlive
ns_traceInfo	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 32768 / NotExecd / not executed 0 / PhaseXnoPU / phase points to X, no pick up 4 / PhaseXTorque / based on phase torques 2 / PhaseYnoPU / phase points to Y, no pick up 6 / PhaseYTorque / based on phase torques 1 / NegXnoPU / neg. points to X, no pick up 5 / NegXSeq / based on neg. seq.

		3 NegYnoPU neg. points to Y, no pick up 7 NegYSeq based on neg. seq.
nsngl	UINT16	number of device connections present, counter, list len **Numeric Type, Range: 0-65535** Action: Value Multiplier: 1 Adder: 0
nt	UINT16	Number of team records **Numeric Type, Range: 0-65535** Action: Value Multiplier: 1 Adder: 0
NumberFrames	UINT16	Number frames have been currently written on CF **Numeric Type, Range: 0-3600** Action: Value Multiplier: 1 Adder: 0
NumDataElements	UINT16	Actual number of data elements in DLV **Numeric Type, Range: 0-65535** Action: Value Multiplier: 1 Adder: 0
NumDevicesinFN	UINT16	Number of devices in the Feeder Net **Numeric Type, Range: 0-65535** Action: Value Multiplier: 1 Adder: 0
NumNodeID	UINT16	Number of Node IDs in the list **Numeric Type, Range: 0-65535** Action: Value Multiplier: 1 Adder: 0
NumNodeIndex	UINT16	Number of indexes in the Node table **Numeric Type, Range: 0-65535** Action: Value Multiplier: 1 Adder: 0
NumOfDevices	UINT16	Netview number of devices/switches in DivisionNet **Numeric Type, Range: 0-65535** Action: Value

		Multiplier: 1 Adder: 0
NumOfPowSrc	UINT16	Number of power sources in DivisionNet **Numeric Type, Range: 0-65535** Multiplier: 1 Adder: 0
NumOfRows	UINT16	Net Present NetView number of rows in table for DivisionNet **Numeric Type, Range: 0-65535** Multiplier: 1 Adder: 0
NumOfTeams	UINT16	Number of teams **Numeric Type, Range: 0-65535** Multiplier: 1 Adder: 0
NumOfWirePairs	UINT16	Number of entries in the D-W (Device-Wire) tables **Numeric Type, Range: 0-65535** Multiplier: 1 Adder: 0
NumPaths	UINT16	Number of paths in this particular Feeder Net **Numeric Type, Range: 0-65535** Multiplier: 1 Adder: 0
NumPayLoad	UINT16	Quantity of associated payload elements **Numeric Type, Range: 0-65535** Multiplier: 1 Adder: 0
NumRunners	UINT16	Number of runners **Numeric Type, Range: 0-65535** Multiplier: 1 Adder: 0
ObjectLength	UINT16	**Numeric Type, Range: 0-65535** Multiplier: 1

		Adder: 0
ObjID	UINT16	Object ID **Numeric Type, Range: 0-65535** Action: Value Multiplier: 1 Adder: 0
ObjState	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / NETOBJSTATENONE / No net object state 1 / NETOBJSTATEREADY / Net object state is ready 2 / NETOBJSEBUFFERED / Net object state is buffered 3 / NETOBJSTATEACKEXEC / Net object state positive ack 4 / NETOBJNACKEXEC / Net object state negative ack 5 / NETOBJSTATEHOLD / Net object state is on hold 6 / NETOBJSTATESEND / Net object state sent 7 / NETOBJSENDWAIT / Net object state is waiting to be sent 8 / NETOBJSENDCONTINUE / Net object state is contiued to be sent 9 / NETOBJSTATEREMOVE / Net object state is removed 10 / NETOBJRECEIVED / Net object state is recieved 11 / NETOBJSENDDELAY / Net object state is delayed
OneHexByte	UINT16	Values represented in hexadecimal code **Numeric Type, Range: 0-255** Action: Value Multiplier: 1 Adder: 0 **Presentation** **Binary** {0:X2}
OnOff	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 / ON / ON 0 / OFF / OFF
OpenPolesCommandArg	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 / Pole1 / Pole 1 2 / Pole2 / Pole 2 3 / Poles12 / Poles 1 and 2 4 / Pole3 / Pole 3 5 / Poles13 / Poles 1 and 3 6 / Poles23 / Poles 2 and 3 7 / Poles123 / Poles 1 and 2 and 3
OpenSrcSectCommandArg	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 / Enabled / PulseClose

<table>
<tr><td></td><td></td><td>
<table>
<tr><td>2</td><td>Blocked</td><td>Close</td></tr>
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</td></tr>
<tr><td>OperationNumber</td><td>UINT16</td><td>Operation Number (in Test Sequence)

<table>
<tr><th colspan="2">Numeric Type, Range: 1-4</th></tr>
<tr><th>Action</th><th>Value</th></tr>
<tr><td>Multiplier</td><td>1</td></tr>
<tr><td>Adder</td><td>0</td></tr>
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</td></tr>
<tr><td>OperationRecord</td><td>UINT16</td><td>
<table>
<tr><th colspan="3">Enumeration</th></tr>
<tr><th>Binary</th><th>Value</th><th>Descripion</th></tr>
<tr><td>0</td><td>NOP</td><td>NOP</td></tr>
<tr><td>1</td><td>Open1</td><td>Open1</td></tr>
<tr><td>2</td><td>Open3</td><td>Open3</td></tr>
<tr><td>3</td><td>Close1</td><td>Close1</td></tr>
<tr><td>4</td><td>Close3</td><td>Close3</td></tr>
<tr><td>5</td><td>Pulse1</td><td>Pulse1</td></tr>
<tr><td>6</td><td>PulseClose1</td><td>PulseClose1</td></tr>
<tr><td>7</td><td>PulseClose3</td><td>PulseClose3</td></tr>
<tr><td>8</td><td>ManualOpen</td><td>ManualOpen</td></tr>
<tr><td>9</td><td>Open2</td><td>Open2</td></tr>
<tr><td>10</td><td>Close2</td><td>Close2</td></tr>
<tr><td>11</td><td>PulseClose2</td><td>PulseClose2</td></tr>
<tr><td>12</td><td>PulseRepulse1</td><td>PulseRepulse1</td></tr>
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<tr><td>OperationType</td><td>UINT16</td><td>
<table>
<tr><th colspan="3">Enumeration</th></tr>
<tr><th>Binary</th><th>Value</th><th>Descripion</th></tr>
<tr><td>0</td><td>ThreePhPulse</td><td>3-phase pulse</td></tr>
<tr><td>1</td><td>ThreePhClose</td><td>3-phase close</td></tr>
<tr><td>2</td><td>SinglePhPulse</td><td>1 phase pulse</td></tr>
<tr><td>3</td><td>SinglePhClose</td><td>1 phase pulse</td></tr>
<tr><td>5</td><td>ThreePhClsPrev</td><td>3-phase close - previous settings</td></tr>
<tr><td>7</td><td>SinglePhClsPrev</td><td>1 phase pulse - previous settings</td></tr>
<tr><td>8</td><td>ThreePhPlsPrev</td><td>3-phase pulse - previous settings</td></tr>
<tr><td>10</td><td>SinglePhPlsPrev</td><td>1 phase pulse - previous settings</td></tr>
<tr><td>11</td><td>SinglePhPlsClsPrev</td><td>1 phase pulse - previous settings</td></tr>
<tr><td>17</td><td>ThreePhCloseSimul</td><td>1 phase pulse - previous settings</td></tr>
<tr><td>19</td><td>SinglePhCloseSimul</td><td>1 phase pulse - previous settings</td></tr>
<tr><td>21</td><td>ThreePhClsPrvSimul</td><td>1 phase pulse - previous settings</td></tr>
<tr><td>23</td><td>OnePhClsPrevSimul</td><td>1 phase pulse - previous settings</td></tr>
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<tr><td>overcurrentRelayArg</td><td>UINT16</td><td>
<table>
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<tr><th>Binary</th><th>Value</th><th>Descripion</th></tr>
<tr><td>0</td><td>Pole1TermX</td><td>Pole1TermX</td></tr>
<tr><td>1</td><td>Pole2TermX</td><td>Pole2TermX</td></tr>
<tr><td>2</td><td>Pole3TermX</td><td>Pole3TermX</td></tr>
<tr><td>3</td><td>GrndTermX</td><td>Grnd TermX</td></tr>
<tr><td>4</td><td>NegTermX</td><td>Neg Term X</td></tr>
<tr><td>5</td><td>SEFTermX</td><td>SEF TermX</td></tr>
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		6 Pole1TermY Pole1TermY 7 Pole2TermY Pole2TermY 8 Pole3TermY Pole3TermY 9 GrndTermY Grnd TermY 10 NegTermY Neg Term Y 11 SEFTermY SEF TermY 12 Pole1XIFS Pole1X IFS 13 Pole2XIFS Pole2X IFS 14 Pole3XIFS Pole3X IFS 15 GrndXIFS Grnd X IFS 18 Pole1YIFS Pole1Y IFS 19 Pole2YIFS Pole2Y IFS 20 Pole3YIFS Pole3Y IFS 21 GrndYIFS Grnd Y IFS
overfrequencyRelayArg	UINT16	**Enumeration** **Binary** **Value** **Descripion** 0 ThreePhase
overvoltageRelayArg	UINT16	**Enumeration** **Binary** **Value** **Descripion** 0 Pole1 Pole 1 1 Pole2 Pole 2 2 Pole3 Pole 3 3 ZeroSeq Zero Seq 4 NegSeq Neg Seq 9 ThreePhase 3 Phase
P0Value	INT16	kW **Numeric Type, Range: -32768-32767** **Action** **Value** Multiplier 1 Adder 0 **Presentation** **Binary** **####### kW**
PDChangeStatus	UINT16	**Enumeration** **Binary** **Value** **Descripion** 0 Unknown Unknown 1 Found Found 2 Removed Removed
Phase	UINT16	**Enumeration** **Binary** **Value** **Descripion** 3 ThreePhase Three Phase 1 OnePhase Single Phase Mode
phase_traceInfo	UINT16	**Enumeration** **Binary** **Value** **Descripion**

		32768 NotExecd not executed 1 NegXnoPU neg. points to X, no pick up 5 NegXSeq based on neg. seq. 3 NegYnoPU neg. points to Y, no pick up 7 NegYSeq based on neg. seq. 8 PickupA phase A picked up 16 PickupB phase B picked up 32 PickupC phase C picked up 24 PickupAB phase AB picked up 48 PickupBC phase BC picked up 40 PickupAC phase AC picked up 56 PickupABC phase ABC picked up 128 LOVAXnoPU low volt. ph A, points to X, no pick up 132 LOVAX low volt. ph A 130 LOVAYnoPU low volt. ph A, points to Y, no pick up 134 LOVAY low volt. ph A 64 LOVBXnoPU low volt. ph B, points to X, no pick up 68 LOVBX low volt. ph B 66 LOVBYnoPU low volt. ph B, points to Y, no pick up 70 LOVBY low volt. ph B 192 LOVCXnoPU low volt. ph C, points to X, no pick up 196 LOVCX low volt. ph C 194 LOVCYnoPU low volt. ph C, points to Y, no pick up 198 LOVCY low volt. ph C 512 Threeph 3ph fault 0 NoFault no fault detected
PhaseOvrCurrent	UINT16	Pole X Over Current **Numeric Type, Range: 0-7** **Action** / **Value** Multiplier 1 Adder 0
PMUClass	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 Unknown Unknown 1 PClass P-Class 2 MClass M-Class
PMUConfigError	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 PerformanceClass Performance Class 2 FrameRate Frame Rate 3 PhasorNotation PhasorNotation 4 VoltScaleFactor Voltage Scaling Factor 5 CurrentScaleFactor Current Scaling Factor 6 NominalFrequency Nominal Frequency

<table>
<tr><td></td><td></td><td><table><tr><td>7</td><td>ModeBits</td><td>Mode Bits</td></tr></table></td></tr>
<tr><td>PMUDataConcentratorCmd</td><td>UINT16</td><td><table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>0</td><td>Unknown</td><td>Unknown</td></tr><tr><td>1</td><td>TurnoffXmitFrames</td><td>XmitFrames Off Cmd</td></tr><tr><td>2</td><td>TurnonXmitFrames</td><td>XmitFrames On Cmd</td></tr><tr><td>3</td><td>SendHDRFrame</td><td>Send HDR frame</td></tr><tr><td>4</td><td>SendCFG1frame</td><td>Send CFG-1 frame</td></tr><tr><td>5</td><td>SendCFG2frame</td><td>Send CFG-2 frame</td></tr><tr><td>6</td><td>SendCFG3frame</td><td>Send CFG-3 frame</td></tr><tr><td>7</td><td>Reserved_7</td><td>Reserved7</td></tr><tr><td>8</td><td>Extendedframe</td><td>Extended frame</td></tr><tr><td>9</td><td>Reserved_9</td><td>Reserved9</td></tr><tr><td>10</td><td>Reserved_10</td><td>Reserved10</td></tr><tr><td>11</td><td>Reserved_11</td><td>Reserved11</td></tr></table></td></tr>
<tr><td>PMUErrorCode</td><td>UINT16</td><td><table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>0</td><td>ValidCommand</td><td>Valid Command</td></tr><tr><td>1</td><td>InvalidCommand</td><td>Invalid Command</td></tr><tr><td>2</td><td>InvalidPMUIDCODE</td><td>Invalid PMU IDCODE</td></tr><tr><td>3</td><td>UnknownMsgType</td><td>Unknown Msg Type</td></tr><tr><td>4</td><td>ChecksumError</td><td>Checksum Error</td></tr><tr><td>5</td><td>DataXmitDisabled</td><td>Data Xmit Disabled</td></tr><tr><td>6</td><td>UnsupportedMode</td><td>Unsupported Mode</td></tr><tr><td>7</td><td>PMUNotReady</td><td>PMU Not Ready</td></tr><tr><td>8</td><td>InvalidPDCIPAddr</td><td>Invalid PDC IP Addr</td></tr><tr><td>9</td><td>TransportMismatch</td><td>Xport Mismatches PMU cfg</td></tr></table></td></tr>
<tr><td>PMUNotReady</td><td>UINT16</td><td><table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>0</td><td>Unknown</td><td>Unknown</td></tr><tr><td>1</td><td>InvalidSettings</td><td>Invalid Settings</td></tr><tr><td>2</td><td>IncompatCommsMod</td><td>Incompat Comms Mod</td></tr><tr><td>3</td><td>PMUDataXmitForbid</td><td>PMU Data Xmit Forbidden</td></tr></table></td></tr>
<tr><td>PMUState</td><td>UINT16</td><td><table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>1</td><td>Heathy</td><td>Healthy</td></tr><tr><td>2</td><td>RampingUp</td><td>Ramping Up</td></tr></table></td></tr>
<tr><td>PNGAnalysisResult</td><td>UINT16</td><td>One of the following:<table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>0</td><td>Unfaulted</td><td>Feeder unfaulted</td></tr><tr><td>1</td><td>Faulted</td><td>Feeder faulted</td></tr><tr><td>2</td><td>Invalid</td><td>Analysis invalid</td></tr></table></td></tr>
</table>

<table>
<tr><td>PNGPredictedFeederCurrent</td><td>INT16</td><td>Predicted feeder current in Amps

<table><tr><th colspan="2">Numeric Type, Range: 0-65535</th></tr><tr><th>Action</th><th>Value</th></tr><tr><td>Multiplier</td><td>1</td></tr><tr><td>Adder</td><td>0</td></tr></table></td></tr>
<tr><td>PNGPulseAngle</td><td>INT16</td><td>Pulse closing angle per unit

<table><tr><th colspan="2">Numeric Type, Range: -2-2</th></tr><tr><th>Action</th><th>Value</th></tr><tr><td>Multiplier</td><td>0.000061035</td></tr><tr><td>Adder</td><td>0</td></tr></table></td></tr>
<tr><td>Point</td><td>UINT16</td><td><table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>1</td><td>PtToOpIR</td><td>Point to operate IR</td></tr><tr><td>2</td><td>PtToBlkRecl</td><td>Point to block reclosing</td></tr><tr><td>3</td><td>PtToBlkGTrip</td><td>Point to block ground trip</td></tr><tr><td>4</td><td>PtToChgProf</td><td>Point to change profile</td></tr></table></td></tr>
<tr><td>PoleCurrent</td><td>UINT16</td><td>Pole Current

<table><tr><th colspan="2">Numeric Type, Range: 0-65535</th></tr><tr><th>Action</th><th>Value</th></tr><tr><td>Multiplier</td><td>1</td></tr><tr><td>Adder</td><td>0</td></tr></table></td></tr>
<tr><td>PoleMask</td><td>UINT16</td><td><table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>0</td><td>None</td><td>None</td></tr><tr><td>1</td><td>Pole1</td><td>Pole 1</td></tr><tr><td>2</td><td>Pole2</td><td>Pole 2</td></tr><tr><td>3</td><td>Poles12</td><td>Poles 1 and 2</td></tr><tr><td>4</td><td>Pole3</td><td>Pole 3</td></tr><tr><td>5</td><td>Poles13</td><td>Poles 1 and 3</td></tr><tr><td>6</td><td>Poles23</td><td>Poles 2 and 3</td></tr><tr><td>7</td><td>Poles123</td><td>Poles 1 and 2 and 3</td></tr></table></td></tr>
<tr><td>PoleName</td><td>UINT16</td><td><table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>0</td><td>Pole1</td><td>Pole 1</td></tr><tr><td>1</td><td>Pole2</td><td>Pole 2</td></tr><tr><td>2</td><td>Pole3</td><td>Pole 3</td></tr><tr><td>254</td><td>NotApplicable</td><td>N/A</td></tr><tr><td>255</td><td>Pole2Poles</td><td>Pole 2 Poles</td></tr></table></td></tr>
<tr><td>PoleNumber</td><td>UINT16</td><td>Pole Number

<table><tr><th colspan="2">Numeric Type, Range: 0-2</th></tr><tr><th>Action</th><th>Value</th></tr><tr><td>Multiplier</td><td>1</td></tr></table></td></tr>
</table>

<table>
<tr><td></td><td></td><td><table><tr><td>Adder</td><td>0</td></tr></table></td></tr>
<tr><td>PoleStatus</td><td>UINT16</td><td><table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>1</td><td>Open</td><td>Open</td></tr><tr><td>2</td><td>Closed</td><td>Closed</td></tr><tr><td>255</td><td>Unknown</td><td>NoOutput</td></tr></table></td></tr>
<tr><td>PoleVoltage</td><td>UINT16</td><td>Pole Voltage

<table><tr><th colspan="2">Numeric Type, Range: 0-65535</th></tr><tr><th>Action</th><th>Value</th></tr><tr><td>Multiplier</td><td>1</td></tr><tr><td>Adder</td><td>0</td></tr></table></td></tr>
<tr><td>PortCode</td><td>UINT16</td><td>Communication port code.

<table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>0</td><td>UDP</td><td>UDP</td></tr><tr><td>1</td><td>PortA</td><td>portA</td></tr><tr><td>2</td><td>PortB</td><td>portB</td></tr><tr><td>3</td><td>PortC</td><td>portC</td></tr><tr><td>4</td><td>PortD</td><td>portD</td></tr><tr><td>6</td><td>TCPV6</td><td>TCP Virtual Port 6</td></tr><tr><td>7</td><td>TCPV7</td><td>TCP Virtual Port 7</td></tr><tr><td>8</td><td>TCPV8</td><td>TCP Virtual Port 8</td></tr><tr><td>9</td><td>TCPV9</td><td>TCP Virtual Port 9</td></tr><tr><td>10</td><td>TCPV10</td><td>TCP Virtual Port 10</td></tr><tr><td>11</td><td>TCPV11</td><td>TCP Virtual Port 11</td></tr><tr><td>12</td><td>TCPV12</td><td>TCP Virtual Port 12</td></tr><tr><td>13</td><td>TCPV13</td><td>TCP Virtual Port 13</td></tr><tr><td>14</td><td>TCPV14</td><td>TCP Virtual Port 14</td></tr><tr><td>15</td><td>TCPV15</td><td>TCP Virtual Port 15</td></tr><tr><td>16</td><td>TCPV16</td><td>TCP Virtual Port 16</td></tr><tr><td>17</td><td>TCPV17</td><td>TCP Virtual Port 17</td></tr><tr><td>18</td><td>TCPV18</td><td>TCP Virtual Port 18</td></tr><tr><td>19</td><td>TCPV19</td><td>TCP Virtual Port 19</td></tr><tr><td>20</td><td>TCPV20</td><td>TCP Virtual Port 20</td></tr><tr><td>21</td><td>TCPV21</td><td>TCP Virtual Port 21</td></tr><tr><td>22</td><td>TCPV22</td><td>TCP Virtual Port 22</td></tr><tr><td>23</td><td>TCPV23</td><td>TCP Virtual Port 23</td></tr><tr><td>24</td><td>TCPV24</td><td>TCP Virtual Port 24</td></tr><tr><td>25</td><td>TCPV25</td><td>TCP Virtual Port 25</td></tr><tr><td>26</td><td>TCPV26</td><td>TCP Virtual Port 26</td></tr><tr><td>27</td><td>TCPV27</td><td>TCP Virtual Port 27</td></tr><tr><td>28</td><td>TCPV28</td><td>TCP Virtual Port 28</td></tr><tr><td>29</td><td>TCPV29</td><td>TCP Virtual Port 29</td></tr><tr><td>30</td><td>TCPV30</td><td>TCP Virtual Port 30</td></tr></table></td></tr>
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		31 TCPV31 TCP Virtual Port 31 32 TCPV32 TCP Virtual Port 32 33 TCPV33 TCP Virtual Port 33 34 TCPV34 TCP Virtual Port 34 35 TCPV35 TCP Virtual Port 35 36 TCPV36 TCP Virtual Port 36 37 TCPV37 TCP Virtual Port 37 38 TCPV38 TCP Virtual Port 38 255 Undefined Undefined 20000 P20000 20000 20001 P20001 20001
POWFaultCurrent	INT16	Leackage Current in amps **Numeric Type, Range: 0-65535** Action: Multiplier = 1; Adder = 0 **Presentation** **Binary** ##### A
ProfileNumber	UINT16	Present range 0-6 due to old profile identification numbers 2 and 3 being reserved **Enumeration** 0 GP1 General Profile 1 1 GP2 General Profile 2 2 GP3 General Profile 3 3 GP4 General Profile 4 4 CP1 Closing Profile 1 5 CP2 Closing Profile 2 6 HLT Hot Line Tag Profile
PRReason	UINT16	**Enumeration** 1 UnderFrequency Under Frequency 2 HotLineTag Hot Line Tag 3 ManualOperation Manual Operation 4 LocalCommand Local Command 5 AuxInput Aux Input 6 StateMismatch State Mismatch 7 SCADAMaster SCADA Master
Q1	INT16	Q1 **Numeric Type, Range: -16384-16383.5** Action: Multiplier = 0.5; Adder = 0 **Presentation**

		Binary #####.#
Q10	INT16	Q10 **Numeric Type, Range: -32-31.9990234375** **Action** / **Value** Multiplier / 0.0009765625 Adder / 0 **Presentation** **Binary** ##.##########
Q11	INT16	Q11 **Numeric Type, Range: -16-15.99951171875** **Action** / **Value** Multiplier / 0.00048828125 Adder / 0 **Presentation** **Binary** ##.###########
Q12	INT16	Q12 **Numeric Type, Range: -8-7.999755859375** **Action** / **Value** Multiplier / 0.0002441 Adder / 0 **Presentation** **Binary** ###.#
Q13	INT16	Q13 **Numeric Type, Range: -4-3.9998779296875** **Action** / **Value** Multiplier / 0.0001220703125 Adder / 0 **Presentation** **Binary** ##.##############
Q14	INT16	Q14 **Numeric Type, Range: -2-1.99993896484375** **Action** / **Value** Multiplier / 0.000061035 Adder / 0 **Presentation** **Binary** ###.#
Q15	INT16	Q15 **Numeric Type, Range: -1-0.999969482421875** **Action** / **Value** Multiplier / 0.000030517578125 Adder / 0

		Presentation **Binary** ##.################
Q2	INT16	Q2 **Numeric Type, Range: -8192-8191.75** **Action** / **Value** Multiplier: 0.25 Adder: 0 **Presentation** **Binary** #####.##
Q3	INT16	Q3 **Numeric Type, Range: -4096-4095.875** **Action** / **Value** Multiplier: 0.125 Adder: 0 **Presentation** **Binary** ####.###
Q4	INT16	Q4 **Numeric Type, Range: -2048-2047.9375** **Action** / **Value** Multiplier: 0.0625 Adder: 0 **Presentation** **Binary** ####.####
Q5	INT16	Q5 **Numeric Type, Range: -1024-1023.96875** **Action** / **Value** Multiplier: 0.03125 Adder: 0 **Presentation** **Binary** ####.#####
Q6	INT16	Q6 **Numeric Type, Range: -512-511.984375** **Action** / **Value** Multiplier: 0.015625 Adder: 0 **Presentation** **Binary** ####.######
Q6V	INT16	Q6 **Numeric Type, Range: -512-511.984375** **Action** / **Value**

		Multiplier: 0.015625 Adder: 0 **Presentation** **Binary** ### V
Q7	INT16	Q7 **Numeric Type, Range: -256-255.9921875** **Action** / **Value** Multiplier: 0.0078125 Adder: 0 **Presentation** **Binary** ###.########
Q8	INT16	Q8 **Numeric Type, Range: -128-127.99609375** **Action** / **Value** Multiplier: 0.00390625 Adder: 0 **Presentation** **Binary** ###.########
Q9	INT16	Q9 **Numeric Type, Range: -64-63.998046875** **Action** / **Value** Multiplier: 0.001953125 Adder: 0 **Presentation** **Binary** ###.##########
Q9Hz	INT16	Q9 **Numeric Type, Range: -64-63.998046875** **Action** / **Value** Multiplier: 0.001953125 Adder: 0 **Presentation** **Binary** ### Hz
RAW	UINT16	RAW **Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier: 1 Adder: 0
RebootStatus	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / SuccessfulReboot / Success fulReboot 1 / UnsuccessfulReboot / Heartbeat Timeout

<table>
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<table>
<tr><th colspan="3">Enumeration</th></tr>
<tr><th>Binary</th><th>Value</th><th>Descripion</th></tr>
<tr><td>1</td><td>P0X</td><td>P0-X</td></tr>
<tr><td>2</td><td>P0Y</td><td>P0-Y</td></tr>
<tr><td>3</td><td>V0X</td><td>V0-X</td></tr>
<tr><td>4</td><td>V0Y</td><td>V0-Y</td></tr>
<tr><td>5</td><td>V0ResetTimingX</td><td>V0-Reset-Timing-X</td></tr>
<tr><td>6</td><td>V0ResetTimingy</td><td>V0-Reset-Timing-Y</td></tr>
<tr><td>7</td><td>V0DelayTimingX</td><td>V0 Delay Timing-X</td></tr>
<tr><td>8</td><td>V0DelayTimingY</td><td>V0 Delay Timing-Y</td></tr>
<tr><td>9</td><td>UTTTimingX</td><td>UTT-Timing-X</td></tr>
<tr><td>10</td><td>UTTTimingY</td><td>UTT-Timing-Y</td></tr>
<tr><td>41</td><td>LatchSX</td><td>Latch-S-X</td></tr>
<tr><td>42</td><td>LatchSY</td><td>Latch-S-Y</td></tr>
<tr><td>43</td><td>LatchRX</td><td>Latch-R-X</td></tr>
<tr><td>44</td><td>LatchRY</td><td>Latch-R-Y</td></tr>
<tr><td>45</td><td>LatchQX</td><td>Latch-Q-X</td></tr>
<tr><td>46</td><td>LatchQY</td><td>Latch-Q-Y</td></tr>
<tr><td>47</td><td>V0ResetTripX</td><td>V0-Reset-Trip-X</td></tr>
<tr><td>48</td><td>V0ResetTripY</td><td>V0-Reset-Trip-Y</td></tr>
<tr><td>49</td><td>V0DelayTripX</td><td>V0 Delay Trip-X</td></tr>
<tr><td>50</td><td>V0DelayTripY</td><td>V0 Delay Trip-Y</td></tr>
<tr><td>51</td><td>UTTTripX</td><td>UTT-Trip-X</td></tr>
<tr><td>52</td><td>UTTTripY</td><td>UTT-Trip-Y</td></tr>
<tr><td>53</td><td>TRIPX</td><td>TRIP-X</td></tr>
<tr><td>54</td><td>TRIPY</td><td>TRIP-Y</td></tr>
</table>
</td></tr>
<tr><td>RegistrationStatus</td><td>UINT16</td><td>
<table>
<tr><th colspan="3">Enumeration</th></tr>
<tr><th>Binary</th><th>Value</th><th>Descripion</th></tr>
<tr><td>0</td><td>DNPRETURNGOOD</td><td>DNP return is good</td></tr>
<tr><td>1</td><td>DNPRETURNERROR</td><td>DNP return error</td></tr>
<tr><td>2</td><td>DNPRTNERRONLIST</td><td>DNP return error already on the list</td></tr>
<tr><td>3</td><td>DNPRTNERRLISTFULL</td><td>DNP return error is full</td></tr>
<tr><td>4</td><td>DNPRTNOTONLIST</td><td>DNP return error not on list</td></tr>
<tr><td>5</td><td>DNPRTNERRNOTP2P</td><td>DNP return error not P2P</td></tr>
<tr><td>6</td><td>DNPRTNDELAY</td><td>DNP return delayed before retry</td></tr>
<tr><td>7</td><td>DNPRTNACTIVEPOINT</td><td>DNP return active on point</td></tr>
<tr><td>8</td><td>DNPRETURNCOMPLETE</td><td>DNP return is complete</td></tr>
<tr><td>9</td><td>DNPRTNINPROGRESS</td><td>DNP return in progress</td></tr>
<tr><td>10</td><td>DNPRRNNOTAMASTER</td><td>DNP return not a master</td></tr>
</table>
</td></tr>
<tr><td>RelayNumber</td><td>UINT16</td><td>
<table>
<tr><th colspan="2">Union</th></tr>
<tr><th>Value</th><th>DataType</th></tr>
<tr><td>OvVolt</td><td>overvoltageRelayArg</td></tr>
<tr><td>UndVolt</td><td>undervoltageRelayArg</td></tr>
<tr><td>OvFreq</td><td>overfrequencyRelayArg</td></tr>
<tr><td>UndFreq</td><td>underfrequencyRelayArg</td></tr>
</table>
</td></tr>
</table>

		ColdLoad: cold_loadRelayArg OvCurr: overcurrentRelayArg SyncChk: synch_checkRelayArg GoodSrc: good_sourceRelayArg PhLoss: ATXPLIInstanceType SEFCntr: good_sourceRelayArg ROCOF: ROCOFRelayArg
RelayType	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 2 / OvVolt / overvoltage 4 / UndVolt / undevoltage 6 / OvFreq / overfrequency 8 / UndFreq / underfrequency 12 / ColdLoad / cold_load 14 / OvCurr / overcurrent 16 / DirPower / Directioanl_Power 18 / SyncChk / synch_check 20 / GoodSrc / good_source 24 / PhLoss / phase_loss 26 / SEFCntr / SEF Pulse Counter 28 / Wattmetric / Wattmetric 30 / DTAP / DTAP 32 / ROCOF / ROCOF
ReplacePrfCommandArg	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / NormalGen / Normal Gen 1 / AltGen / Alternate Gen 2 / AltLever / Alternate Gen GTB Lever 4 / Closing1 / Closing #1 5 / Closing2 / Closing #2 6 / HotLineTag / Hot Line Tag
RestoreConditionTestResult	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / NoResult / NO RESULT 1 / CloseSwOK / CLOSE SW OK 2 / Isolated / ISOLATED 3 / ExcessLoad / EXCESSIVE LOAD 4 / CloseOnly / CLOSE ONLY 5 / OpenOnly / OPEN ONLY 6 / LineSegLimit / LINE SEGMENT LIMIT 7 / NbrProblem / NEIGHBOR ERROR 8 / PhaseLoss / PHASE LOSS 9 / SrcBrkIsol / SRC BREAK ISOLATED 10 / LoadShed / LOAD SHED 11 / Short2Srces / SHORT TWO SOURCES

		100 CoordProblem COORD ERROR 101 PrevBadV PREV BAD VOLT
ROCOFRelayArg	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 ROCOF_81R1 81R1 1 ROCOF_81R2 81R2 2 ROCOF_81R3 81R3 3 ROCOF_81R4 81R4
RouteEntryError	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 BadBdCastAdr broadcast addresses invalid in routing tables; 2 IPPortNoMutx IP address and port indication must be mutually exclusive.
RSD	UINT16	Runner Source Device **Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier 1 Adder 0
RTLFromSCADAPR	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 RTLDisabBySCADAPR Disabled 1 RTLEnabBySCADAPR Enabled 2 NA Not Applicable
RTUAddress	UINT16	DNP address **Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier 1 Adder 0
RTUlists	UINT16	Runner RTU lists **Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier 1 Adder 0
RunnerIndex	UINT16	Local runner index number **Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier 1 Adder 0
RunnerNumber	UINT16	Runner Number **Numeric Type, Range: 0-65535** **Action** / **Value**

<table>
<tr><td></td><td></td><td><table><tr><td>Multiplier</td><td>1</td></tr><tr><td>Adder</td><td>0</td></tr></table></td></tr>
<tr><td>RunnerQuantity</td><td>UINT16</td><td>Next data collection runner's quantity

<table><tr><th colspan="2">Numeric Type, Range: 0-65535</th></tr><tr><th>Action</th><th>Value</th></tr><tr><td>Multiplier</td><td>1</td></tr><tr><td>Adder</td><td>0</td></tr></table></td></tr>
<tr><td>RunnerSize</td><td>UINT16</td><td>Size of recieved runner in BYTES

<table><tr><th colspan="2">Numeric Type, Range: 0-65535</th></tr><tr><th>Action</th><th>Value</th></tr><tr><td>Multiplier</td><td>1</td></tr><tr><td>Adder</td><td>0</td></tr></table></td></tr>
<tr><td>RunnerType</td><td>UINT16</td><td><table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>0</td><td>NETOBJTYPEUNDEF</td><td>NetObject type is undefined</td></tr><tr><td>1</td><td>NETOBJTYPEACKMESG</td><td>NetObject type acknowldege message</td></tr><tr><td>2</td><td>NETOBJTYPENACKMESG</td><td>NetObject type not acknowledging message</td></tr><tr><td>3</td><td>NETOBJTYPENETLIST</td><td>NetObject type net list</td></tr><tr><td>4</td><td>NETOBJTYPERAWPUSH</td><td>NetObject type raw push</td></tr><tr><td>16</td><td>NETxCMMCKRSP</td><td>ITD Communications check runner with routing</td></tr><tr><td>19</td><td>NETxNLRQST</td><td>Request a copy of the present Primary Netlist</td></tr><tr><td>21</td><td>NETxNPRIRSP</td><td>Existing Primary Netlist Response to rqst</td></tr><tr><td>22</td><td>NETxACTPNL</td><td>Activate Primary Netlist After Delay</td></tr><tr><td>23</td><td>NETxNADJNLD</td><td>New Adjacent Netlist delivery</td></tr><tr><td>24</td><td>NETxDATCLCT</td><td>Data Collect Runner</td></tr><tr><td>25</td><td>NETxDATDLV</td><td>Data Block delivery runner</td></tr><tr><td>27</td><td>NETxADJNLRPT</td><td>Tie delivers an adjacent NL to a Runner Source for delivery</td></tr><tr><td>28</td><td>NETxADJDBRPT</td><td>Tie delivers an adjacent DB to a Runner Source for delivery</td></tr><tr><td>29</td><td>NETxADJDBDLV</td><td>Runner Source delivers an adjacent Data Block to FN</td></tr><tr><td>30</td><td>NETxPEERCHK</td><td>ITD Peer check runner with routing</td></tr><tr><td>160</td><td>NETxNETLRPT</td><td>Active Netlist reporter</td></tr></table></td></tr>
<tr><td>SBOTimerValue</td><td>UINT16</td><td>Timer value for Select-Before-Operate. Unit = 0.1 sec.

<table><tr><th colspan="2">Numeric Type, Range: 0-6553.5</th></tr><tr><th>Action</th><th>Value</th></tr><tr><td>Multiplier</td><td>0.1</td></tr><tr><td>Adder</td><td>0</td></tr></table></td></tr>
<tr><td>SecondaryEvent</td><td>UINT16</td><td>Secondary Event Flag for WFC capture</td></tr>
</table>

		Numeric Type, Range: 0-1 **Action** / **Value** Multiplier / 1 Adder / 0
SectState	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / Undefined / State undefined 1 / Fault / Fault State 2 / LOV / Loss of voltage state 3 / NoLOV / Not in Loss of voltage state
SEEPErrorCode	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / CRCBad / CRC Error 1 / DataBad / Data Error
SetBatAlertCommandArg	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / AlertOff / Alert Off 1 / AlertOn / Alert On
SetClearErrCommandArg	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / Clear / Clear 1 / Set / Set
SetPrfCommandArg	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / NormalGen / Normal Gen 1 / AltGen / Alternate Gen
SetRemoteOffAlertCommandArg	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / AlertOff / Alert Off 1 / AlertOn / Alert On
SettingsShiftStatus	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / Success / Success 1 / OCStillPres / Overcurrent still present 2 / BadTestSeqNo / Bad test sequence number 3 / BadRelayMask / Invalid relay mask specified
SetWIFICommandArg	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / WIFIOff / WIFI Off 1 / WIFIOn1 / WIFI On 1 2 / WIFIOn2 / WIFI On 2
ShiftDirection	UINT16	**Enumeration**

		<table><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>1</td><td>Direction1</td><td>Direction1</td></tr><tr><td>2</td><td>Direction2</td><td>Direction2</td></tr></table>
ShiftState	UINT16	<table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>1</td><td>RequestActive</td><td>Request Active</td></tr><tr><td>2</td><td>RequestCanceled</td><td>Request Canceled</td></tr><tr><td>3</td><td>CEC</td><td>CEC</td></tr><tr><td>4</td><td>GOOSE</td><td>GOOSE</td></tr></table>
ShiftType	UINT16	<table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>1</td><td>TestSequence</td><td>Test Sequence</td></tr><tr><td>2</td><td>SequenceCoord</td><td>Sequence Coordination</td></tr><tr><td>3</td><td>CEC</td><td>CEC</td></tr><tr><td>4</td><td>GOOSE</td><td>GOOSE</td></tr></table>
short	INT16	INT16 <table><tr><th colspan="2">Numeric Type, Range: -32768-32767</th></tr><tr><th>Action</th><th>Value</th></tr><tr><td>Multiplier</td><td>1</td></tr><tr><td>Adder</td><td>0</td></tr></table>
SideInfo	UINT16	<table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>0</td><td>SIDEUNKOWN</td><td>Side information is unkown</td></tr><tr><td>1</td><td>SIDE1</td><td>This team member is on side 1 of the switch</td></tr><tr><td>2</td><td>SIDE2</td><td>This team member is on side of the switch</td></tr></table>
SinglePhOperCommandArg	UINT16	<table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>1</td><td>Enabled</td><td>Enabled</td></tr><tr><td>2</td><td>Blocked</td><td>Blocked</td></tr></table>
SizeOfObject	UINT16	Size of the arriving object in bytes, also a flag/signal of arrival to State machine A <table><tr><th colspan="2">Numeric Type, Range: 0-65535</th></tr><tr><th>Action</th><th>Value</th></tr><tr><td>Multiplier</td><td>1</td></tr><tr><td>Adder</td><td>0</td></tr></table>
SpecExtWFCCommandArg	UINT16	<table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>0</td><td>Disabled</td><td>Disabled</td></tr><tr><td>1</td><td>Enabled</td><td>Enabled</td></tr></table>
SpecWFCCommandArg	UINT16	<table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>0</td><td>Disabled</td><td>Disabled</td></tr><tr><td>1</td><td>Enabled</td><td>Enabled</td></tr></table>

<table>
<tr><td>SrcNodeID</td><td>UINT16</td><td>NET Source Node ID

<table><tr><th colspan="2">Numeric Type, Range: 0-65535</th></tr><tr><th>Action</th><th>Value</th></tr><tr><td>Multiplier</td><td>1</td></tr><tr><td>Adder</td><td>0</td></tr></table></td></tr>
<tr><td>State</td><td>UINT16</td><td>State of the transition

<table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>1</td><td>TransON</td><td>Transition to On</td></tr><tr><td>2</td><td>TransOFF</td><td>Transition to Off</td></tr></table></td></tr>
<tr><td>StatusFeedbackArea</td><td>UINT16</td><td>Netx status feedback area, Data 1 is current state while Data 2 is the previous state

<table><tr><th colspan="2">Numeric Type, Range: 0-65536</th></tr><tr><th>Action</th><th>Value</th></tr><tr><td>Multiplier</td><td>1</td></tr><tr><td>Adder</td><td>0</td></tr></table></td></tr>
<tr><td>Substation</td><td>UINT16</td><td>Present Substation

<table><tr><th colspan="2">Numeric Type, Range: 0-65535</th></tr><tr><th>Action</th><th>Value</th></tr><tr><td>Multiplier</td><td>1</td></tr><tr><td>Adder</td><td>0</td></tr></table></td></tr>
<tr><td>SUMAccessGroup</td><td>UINT16</td><td><table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>0</td><td>NorA</td><td>N/A</td></tr><tr><td>1</td><td>GenSettings</td><td>Gen Settings</td></tr><tr><td>2</td><td>CommSettings</td><td>Comm Settings</td></tr><tr><td>3</td><td>ProtSettings</td><td>Prot Settings</td></tr><tr><td>4</td><td>RestSettings</td><td>Rest Settings</td></tr><tr><td>5</td><td>SecSettings</td><td>Sec Settings</td></tr><tr><td>6</td><td>Operation</td><td>Operation</td></tr><tr><td>7</td><td>UpdFirmware</td><td>Update Firmware</td></tr></table></td></tr>
<tr><td>SUMSessionEndReason</td><td>UINT16</td><td><table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>0</td><td>DeviceStartup</td><td>Device Startup</td></tr><tr><td>1</td><td>Logoff</td><td>Logoff</td></tr><tr><td>2</td><td>Timeout</td><td>Timeout</td></tr><tr><td>3</td><td>Preempted</td><td>Preempted</td></tr></table></td></tr>
<tr><td>SUPFwuImage</td><td>UINT16</td><td><table><tr><th colspan="3">Enumeration</th></tr><tr><th>Binary</th><th>Value</th><th>Descripion</th></tr><tr><td>0</td><td>reserved</td><td>reserved</td></tr><tr><td>1</td><td>DSP_EOS</td><td>DSP EOS, the operating system interface for the DSP application</td></tr><tr><td>2</td><td>DSP_APP</td><td>DSP Application</td></tr></table></td></tr>
</table>

		3 FPGA FPGA 4 CPLD_FAB CPLD Fabric 5 CPLD_M3 CPLD M3 6 IREC IR-EC Application 7 MCU_RST MCU Reset Configuration Word 8 Linux_FMAN Linux File Manager 9 Linux_PKGARC Linux Personal Package Archive 10 Linux_UBOOT Linux Universal Boot Loader 11 Linux_INIT Linux Boot Script 12 Linux_KRNL Linux Kernel 13 Linux_RFS Linux Root File System Blob 14 Linux_INC Linux Root File System Increment
SUPGeneralErrorCode	UINT16	**Enumeration** **Binary / Value / Descripion** 1 IllegalState Illegal State 2 InitError Initialization Error 3 DeinitError Deinitialization Error 4 SubscError Service Subscription Error 5 InfoReqError System Info Request Error 6 InitStatSendError Initialization Status Send Error 7 FatalCBError Fatal CB Error 8 HeartBeatError HeartBeat Error 9 FwCommitError Firmware Commit Error 10 SendError Send Error
SUPStartReason	UINT16	**Enumeration** **Binary / Value / Descripion** 0 NormalCondition Normal Condition 1 HeartbeatTimeout Heartbeat Timeout 2 SupervisorError Supervisor Error 3 VersionMismatch Version Mismatch 4 FwUpdateError Firmware Update Error 5 FwUpdateInProgress Firmware Update In Progress 6 FwUpdateCompleted Firmware Update Completed
Switch	UINT16	**Numeric Type, Range: 0-65535** **Action / Value** Multiplier 1 Adder 0
SwitchNum	UINT16	**Enumeration** **Binary / Value / Descripion** 1 Switch1 Switch 1 2 Switch2 Switch 2 3 Switch3 Switch 3
SwitchOperationResult	UINT16	**Enumeration** **Binary / Value / Descripion**

		0 SOKNoRes SW OK (no result yet) 1 ClsVerif SW CLOSE VERIFIED 2 ClVerErr SW CLOSE VERIFY ERROR 3 ClVerErrTr SW CLOSE VERIFY ERROR TRIP 4 BadSwNum BAD SW NUM 5 SwNotAuto SW NOT AUTO 6 SBadDir SW BAD DIRECTION 7 SwWasCls SW WAS CLOSED 8 OpnVerif SW OPEN VERIFIED 9 OpnVerErr SW OPEN VERIFY ERROR 10 OpnXcesLd SW OPEN EXCESS LOAD 11 SwWasOpn SW WAS OPEN 12 CmdVerif COMMAND VERIFIED 13 CmdRedun COMMAND REDUNDANT 14 CmdVerErr COMMAND VERIFY ERROR 15 BadCtlPt BAD CTRL PT 16 ClsErrV SW CLOSE ERROR VOLT
SwitchPosition	UINT16	Switch position **Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier / 1 Adder / 0
SwitchRecord	UINT16	**Numeric Type, Range: 0-8** **Action** / **Value** Multiplier / 1 Adder / 0
SwitchState	UINT16	Switch State **Enumeration** **Binary** / **Value** / **Descripion** 0 DATUSWSTAT_UNKOWN Switch State is unknown 1 DATUSWSTAT_CLOSED Switch State is closed 2 DATUSWSTAT_OPEN Switch State is open 3 DATUSWSTAT_TRANS Switch State is in transition 4 DATUSWSTAT_UNDEF Switch State is undefined
SWnum	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 SW1 SW1 1 SW2 SW2 2 SW3 SW3
SWPos	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 SW1 SW1 2 SW2 SW2

		3 SW3 SW3 4 SW4 SW4 5 SW5 SW5 6 SW6 SW6 7 SW7 SW7 8 SW8 SW8
synch_checkRelayArg	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / ThreePhase /
syncstat	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / DATASYNCHSUCCESS / Operation was successful 1 / DATSYNCHBADSTATE / Present States of Local Switches do not match Normal states 2 / DATSYNCHNOTQUIET / IntelliTEAM is not 'quiet' (in the process of transferring) 3 / DATSYNCHNETBADDATA / Netlist data is somehow invalid (e.g. no local teams) 4 / DATSYNCHNINPROCESS / Presently processing a new netlist 5 / DATSYNCHNORTUADDR / Device is not configured with an RTU address
SystemFrequency	UINT16	50 or 60 (Hz) **Numeric Type, Range: 50-60** **Action** / **Value** Multiplier / 1 Adder / 0
SystemRotation	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / RotationUndf / Rotation undefined 1 / ABCrotation / ABC rotation 2 / ACBrotation / ACB rotation
SystemVoltage	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 / V69000 / 69000 2 / V46000 / 46000 3 / V44000 / 44000 4 / V40600 / 40600 5 / V36000 / 36000 6 / V34500 / 34500 7 / V27600 / 27600 8 / V26400 / 26400 9 / V24900 / 24900 10 / V23900 / 23900 11 / V22900 / 22900 12 / V20800 / 20800

		13 V14400 14400 14 V13800 13800 15 V13200 13200 16 V12470 12470 17 V12000 12000 18 V8320 8320 19 V7200 7200 20 V4800 4800 21 V4160 4160 22 V33000 33000 23 V22000 22000 24 V20000 20000 25 V11000 11000 26 V10000 10000
Task	UINT16	**Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier / 1 Adder / 0
TCPPortActiveState	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / Undefined / Undefined 1 / Unused / Unused 2 / Active / Active 3 / Connect / Connect 4 / Disconnect / Disconnect 5 / Reconnect / Reconnect 6 / Error / Error 7 / Blocking / Blocking 8 / KpAliveSend / Send Keep Alive
TCPPortConnectState	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 / Removed / Removed 2 / Disconnecting / Disconnecting 3 / Connecting / Connecting 4 / Changed / Changed 5 / Badstate / Bad state 6 / KpAliveSent / Keep Alive Sent 7 / KpAliveBad / Keep Alive Bad
Team	UINT16	Team number **Numeric Type, Range: 1-8** **Action** / **Value** Multiplier / 1 Adder / 0
TeamNumber	UINT16	**Enumeration**

		Binary / **Value** / **Descripion** 1 / Team1 / Team 1 2 / Team2 / Team 2 3 / Team3 / Team 3 4 / Team4 / Team 4 5 / Team5 / Team 5 6 / Team6 / Team 6 7 / Team7 / Team 7 8 / Team8 / Team 8
TeamNumberWithUnknown	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / DirUnknown / Dir Unknown 1 / Team1 / Team 1 2 / Team2 / Team 2 3 / Team3 / Team 3 4 / Team4 / Team 4 5 / Team5 / Team 5 6 / Team6 / Team 6 7 / Team7 / Team 7 8 / Team8 / Team 8 9 / TeamIsVirtual / Team is virtual
TeamRecord	UINT16	Team record **Numeric Type, Range: 0-8** **Action** / **Value** Multiplier / 1 Adder / 0
TeamWithDone	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 / Member1 / Member 1 2 / Member2 / Member 2 3 / Member3 / Member 3 4 / Member4 / Member 4 5 / Member5 / Member 5 6 / Member6 / Member 6 7 / Member7 / Member 7 8 / Member8 / Member 8 256 / Done / Done
TestingCommandArg	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 / Enabled / Enabled 2 / Blocked / Blocked
TestMode	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / TestModeInactive / Test Mode Inactive

		1 TestModeActive Test Mode Active
TimeSource	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 / MCUInternal / MCU internal oscillator 2 / RTC / MCU RTC 3 / GPS / MCU GPS
totallen	UINT16	Total Length **Numeric Type, Range: 0-65535** **Action** / **Value** Multiplier / 1 Adder / 0
TransferApprovalCode	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 2 / Isolated / Fault isolated 3 / ExcessLoad / Excessive load 4 / CloseOnly / Open team not prepared for the transfer 5 / OpenOnly / Closed team not prepared for the transfer 6 / LineSegLimit / Line segment limit exceeded 7 / NbrProblem / Issue detected on one of the teams 8 / PhaseLoss / Phase loss isolated 9 / SrcBrkIsol / Source breaker isolated
TransferState	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / IDLE / IDLE 1 / INIT / INIT 2 / RQST / RQST 3 / GRNT / GRNT 4 / RTN0 / RTN0 5 / RTN1 / RTN1 6 / RTN2 / RTN2 7 / RTN3 / RTN3 8 / WAIT / WAIT 9 / STOP / STOP 10 / FAULT / FAULT 11 / HOLD / HOLD 12 / CORA / CORA 13 / PLI / PLI 14 / PLIDONE / PLIDONE 15 / PLIWAIT / PLIWAIT 16 / PLIWAIT2 / PLIWAIT2 255 / UNDEF / UNDEF
TripReason	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 / LossOfVoltage / Loss Of Voltage

		1 ExtendedSTL Extended Shots to Lockout
TstBackfeedCommandArg	UINT16	**Enumeration** **Binary** **Value** **Descripion** 0 Enabled Enabled 1 Blocked Blocked
underfrequencyRelayArg	UINT16	**Enumeration** **Binary** **Value** **Descripion** 0 ThreePhase
undervoltageRelayArg	UINT16	**Enumeration** **Binary** **Value** **Descripion** 5 Pole1 Pole 1 6 Pole2 Pole 2 7 Pole3 Pole 3 8 NoSource No Source 10 ThreePhase 3 Phase 13 Sect Sectionalizer
URBEStatus	UINT16	**Enumeration** **Binary** **Value** **Descripion** 1 Enabled Enabled 0 Disabled Disabled
UseClosePrfCommandArg	UINT16	**Enumeration** **Binary** **Value** **Descripion** 1 Second Second 2 First First
ushort	UINT16	UINT16 **Numeric Type, Range: 0-65535** **Action** **Value** Multiplier 1 Adder 0
VAddr16	UINT16	16-bit virtual memory address **Numeric Type, Range: 0-65535** **Action** **Value** Multiplier 1 Adder 0
VMAccessAction	UINT16	VM Access Action **Enumeration** **Binary** **Value** **Descripion** 0 ReadSpcl ReadSpcl 1 Read Read 2 Read1 Read 3 Write Write 4 Write1 Write

		5 WriteSpcl WriteSpcl
VMFunctionCode	UINT16	**Enumeration** **Binary** **Value** **Descripion** 1 Read read 2 Write write
VMIndex	UINT16	VM table index for this FeederNetID **Numeric Type, Range: 0-65535** **Action** **Value** Multiplier 1 Adder 0
Volts	UINT16	Volts **Numeric Type, Range: 0-65535** **Action** **Value** Multiplier 1 Adder 0 **Presentation** **Binary** ##### **Vrms**
VSSEFLogicState	UINT16	**Enumeration** **Binary** **Value** **Descripion** 0 OFF Inactive 1 ON Active
VSSEFStatus	UINT16	**Enumeration** **Binary** **Value** **Descripion** 1 VSSEF_X Sensitive Earth X Inverse Element Active status changed 2 VSSEF_Y Sensitive Earth X Inverse Element Active status changed 3 VSSEF_DelayX Delay Timer X status changed 4 VSSEF_TripX VSSEF X side trips 5 VSSEF_ZN Single-Phase Protection and Sectionalizing status changed 6 VSSEF_DelayY Delay Timer X status changed 7 VSSEF_HV Trip On Single-Phase Voltage – High Voltage status changed 8 VSSEF_TripY VSSEF Y side trips 9 VSSEFandG1 VSSEF AND Gate1 output status changed 10 VSSEF_LV Trip On Single-Phase Voltage – Low Voltage status changed
WattmetricEventCode	UINT16	**Enumeration** **Binary** **Value** **Descripion** 1 P0X P0-X 2 P0Y P0-Y 3 V0X V0-X 4 V0Y V0-Y

5	V0ResetTimingX	V0-Reset-Timing-X
6	V0ResetTimingy	V0-Reset-Timing-Y
7	AndG1X	AndG1-X
8	AndG1Y	AndG1-Y
41	LatchSX	Latch-S-X
42	LatchSY	Latch-S-Y
43	LatchRX	Latch-R-X
44	LatchRY	Latch-R-Y
45	LatchQX	Latch-Q-X
46	LatchQY	Latch-Q-Y
47	V0ResetTripX	V0-Reset-Trip-X
48	V0ResetTripY	V0-Reset-Trip-Y
49	AndG2X	AndG2-X
50	AndG2Y	AndG2-Y
51	TTTimingX	TT-Timing-X
52	TTTimingY	TT-Timing-Y
53	TTShiftTimeX	TT-ShiftTime-X
54	TTShiftTimeY	TT-ShiftTime-Y
55	TTTRIPX	TT-TRIP-X
56	TTTRIPY	TT-TRIP-Y

WFCTrigger — UINT16

Enumeration		
Binary	**Value**	**Descripion**
1	Current	High Current
2	NormalCurnt	Normal Current
3	VorFreqAbnrm	Volt/Freq Abnormal
4	VorFreqNorm	Volt/Freq Normal
7	CheckOpen	CheckOpen
8	PulseorClose	Pulse/Close
9	BlockClose	Block Close
10	PoleError	Pole Error
11	LeverOpen	Lever Open
12	Timer	Timer
13	User	User
14	LCEFlag	LCE Flag
17	BadVoltageSensor	Bad Voltage Sensor
18	AllPolesClosed	All Poles Closed
19	BadFreqAlarm	Bad Frequency Alarm
20	LkgCurChkErr	Leakage Current Check Error
21	LkgCurSurvey	Leakage Current Survey
22	RepulseCapture	Repulse Capture
23	PulseCapture	Pulse Capture
25	VLossFMS	Voltage Loss FMS
26	DTAP	DTAP
27	Wattmetric	Wattmetric

WFCTriggerInstance — UINT16

Union

		Value / **DataType** Current — overcurrentRelayArg NormalCurnt — overcurrentRelayArg VorFreqAbnrm — miscRelayIndex VorFreqNorm — miscRelayIndex
XferInactiveReason	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 1 — XferDecline — Xfer Decline 2 — XferSuccess — Xfer Success 3 — XferStopped — Xfer Stopped 4 — TimerExpired — Timer Expired
xmtresultcode	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 — NETRETURNSUCCESS — NET return is successful 1 — NETRETURNERROR — NET return has an error
zs_traceInfo	UINT16	**Enumeration** **Binary** / **Value** / **Descripion** 0 — SEFnoVolt — SEF voltage not viable, angle outside lookup table 2048 — SEFangle1 — SEF voltage not viable, V-I angle index = 1 1024 — SEFangle2 — SEF voltage not viable, V-I angle index = 2 3072 — SEFangle3 — SEF voltage not viable, V-I angle index = 3 512 — SEFangle4 — SEF voltage not viable, V-I angle index = 4 2560 — SEFangle5 — SEF voltage not viable, V-I angle index = 5 1536 — SEFangle6 — SEF voltage not viable, V-I angle index = 6 3584 — SEFangle7 — SEF voltage not viable, V-I angle index = 7 256 — Tsef1 — SEF voltage viable, direction determined by Tsef 2304 — Tsef2 — SEF voltage viable, direction determined by Tsef 1280 — Tsef3 — SEF voltage viable, direction determined by Tsef 3328 — Tsef4 — SEF voltage viable, direction determined by Tsef 768 — Tsef5 — SEF voltage viable, direction determined by Tsef 2816 — Tsef6 — SEF voltage viable, direction determined by Tsef 1792 — Tsef7 — SEF voltage viable, direction determined by Tsef 3840 — Tsef8 — SEF voltage viable, direction determined by Tsef 49152 — NotExecd — not executed 16384 — PhaseXnoPU — phase points to X, no pick up 16392 — PhaseXTorques — based on phase torques 16388 — PhaseYnoPU — phase points to Y, no pick up 16396 — PhaseYTorques — based on phase torques 16386 — NegXnoPU — neg. points to X, no pick up 16394 — NegXSeq — based on neg. seq. 16390 — NegYnoPU — neg. points to Y, no pick up 16398 — NegYSeq — based on neg. seq. 16385 — ZeroNegXnoPU — zero+neg points to X, no pick up 16393 — ZeroNegXSeq — based on zero+neg seq. 16389 — ZeroNegYnoPU — zero+neg point to Y, no pick up

		16397	ZeroNegYSeq	based on zero+neg seq.
		16387	ZeroXnoPU	zero points to x, no pick up
		16395	ZeroXSeq	based on zero seq.
		16391	ZeroYnoPU	zero points to Y, no pick up.
		16399	ZeroYSeq	based on zero seq.

Table 3. Historic Events (1704 items)

Event Code (hex)	Event Code (dec)	Description	Category	Logging Level	Definition
0201	513	Event Register OK	DAT[MCU]	Normal	The task indicated has enabled event registering for the specified team. The registering of an event is the process of making all team members aware that an event has occurred. Data 1: **Team** Data1 Type: Team Data 2: **Task** Data2 Type: Task Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0202	514	Error Getting Internal IR Data	DAT[MCU]	Normal	An error was detected when the IntelliTEAM II software collected data related to the internal switch function. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0203	515	Error Getting Local IR Data	DAT[MCU]	Normal	An error was detected when the IntelliTEAM II software retrieved data for the local switch in the specified team. This may occur if the switch/position number configured on the SETUP: Team screen is incorrect. Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0204	516	Error Writing Coach Task-List Full	DAT[MCU]	Normal	The list of pending tasks that the coach carries between team members is full in the specified team. No more tasks can be put on this list until one or more of the existing tasks have been completed. Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0205	517	Error Writing Event Task-List Full	DAT[MCU]	Normal	The list of pending team-related tasks is full in the specified team. No more tasks can be put on this list until one or more of the existing tasks have been completed. Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0206	518	Error Writing Member Task-List Full	DAT[MCU]	Normal	The list of pending member-process tasks is full in the specified team. No more tasks can be put on this list until one or more of the existing tasks have been completed. Data 1: **Team** Data1 Type: Team

					Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0207	519	Error Writing Comm Task-List Full	DAT[MCU]	Normal	The coach or the team member needs to send a new message to another team member and the DNP communications buffer is full. Existing transactions must be completed before more are put on the communications list. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0208	520	Error Getting Comm Task From List	DAT[MCU]	Normal	An error was detected when removing a message from the DNP communications buffer. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0209	521	New Coach Generated	DAT[MCU]	Normal	A new coach has been generated at the local team member for the specified team. This could be caused by a power up state, by the existing coach being lost due to communications error, or by the existing coach data being inconsistent. Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
020A	522	Coach Old or Duplicate or CRC Bad	DAT[MCU]	Extended	The coach received by the specified team is not the current coach - it is a duplicate of the current coach or it contains data inconsistent with the presently expected data. The coach is rejected. Data 1: **Team** Data1 Type: Team Data 2: **Coach Rejection Code** Data2 Type: CoachRejectionCode Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
020B	523	Old or Duplicate Task Discarded	DAT[MCU]	All	The task taken from the event list on the specified team is either old or is a duplicate of an existing task. This occurs normally in the operation of the team as events are distributed throughout the team. Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
020C	524	Switch Not Ready for Transfer	DAT[MCU]	Normal	The local IR on the specified team is not ready for transfer operations. This may be caused by an internal switch error (for example, a bad battery). Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
020D	525	Unknown Event/Task Request	DAT[MCU]	Normal	An event or task for which the local team member is not programmed was requested within the specified team. Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort

020E	526	Find Alternate Source Result	DAT[MCU]	Normal	During a transfer event, the team must find an alternate source, based on the alternate source sequence and the normal function of the switches within the team (both entered on the SETUP: Team screen). This message indicates the resulting switch record, to be used for the team indicated. Data 1: **Team** Data1 Type: Team Data 2: **Rec** Data2 Type: MemberWithDoneAndEOL Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
020F	527	Register Event Disabled	DAT[MCU]	Normal	The registering of events for distribution within the specified team has been disabled at the local team member. This was probably caused by a change in the team's configuration on the SETUP: Team screen. Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0210	528	Member Requested	DAT[MCU]	All	The specified team has requested that the local team member execute the task indicated. Data 1: **Team** Data1 Type: Team Data 2: **Task** Data2 Type: Task Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0211	529	Close Switch OK	DAT[MCU]	Normal	The switch/position indicated was successfully closed by the specified team. Data 1: **Team** Data1 Type: Team Data 2: **Switch Position** Data2 Type: SwitchPosition Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0212	530	Switch Closing Issue	DAT[MCU]	Extended	The switch/position indicated didn't close or remain closed after a request by the specified team. Automatic operation may have been disabled at this team member, or the switch may have reopened during the shots-to-lockout time period. Data 1: **Team** Data1 Type: Team Data 2: **Switch position** Data2 Type: SwitchPosition Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0213	531	Transfer Approved	DAT[MCU]	Normal	The transfer operation requested by the specified team, using the alternate source switch previously determined, was approved by the adjacent teams. The approval code is also shown. For details on the code, contact S&C. Data 1: **Team** Data1 Type: Team Data 2: **Restore Condition Test Result** Data2 Type: RestoreConditionTestResult Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0214	532	Transfer Declined	DAT[MCU]	Normal	The transfer operation requested by the specified team has been declined by the adjacent teams. The requesting team must look for another alternate source, or retry the operation on this alternate source if no other exists. Possible codes are: (code- definition) 2- Fault isolated, 3- Excessive load, 4- Open team not prepared for the transfer, 5- Closed team not prepared for the transfer, 6- Line segment limit exceeded, 7- Issue detected on one of the teams, 8-

					Phase loss isolated, 9- Source breaker isolated. Data 1: **Team** Data1 Type: Team Data 2: **Restore Condition Test Result** Data2 Type: RestoreConditionTestResult Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0215	533	Switch Open OK	DAT[MCU]	Normal	The specified team successfully opened the switch/position indicated. Data 1: **Team** Data1 Type: Team Data 2: **Switch Position** Data2 Type: SwitchPosition Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0216	534	Switch Opening Unsuccesful	DAT[MCU]	Normal	The specified team was unable to open the switch/position indicated. Data 1: **Team** Data1 Type: Team Data 2: **Switch Position** Data2 Type: SwitchPosition Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0217	535	Operation Switch Function Return	DAT[MCU]	Extended	This message displays the internal code returned during the operation of the local switch in the specified team. Contact S&C for code details, this code is application specific. Data 1: **Team** Data1 Type: Team Data 2: **Switch Operation Result Code** Data2 Type: SwitchOperationResult Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0218	536	Coach Arrived	DAT[MCU]	All	This message logs the arrival of the coach, along with all the updated data, at the local team member for the specified team. Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0219	537	Coach Has Departed	DAT[MCU]	All	This message logs the departure of the coach from the local team member for the specified team, and indicates where the coach is going next. Data 1: **Team** Data1 Type: Team Data 2: **Goto Rec** Data2 Type: TeamRecord Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
021A	538	Sequence Numbers Resynchronization	DAT[MCU]	Normal	The sequence numbers of events for the specified team have fallen out of synchronization. The last sequence number received is shown. The local team member will now resynchronize the number. Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
021B	539	Coach Arrived on Request	DAT[MCU]	All	This message logs the arrival of the coach at the local team member of the specified team after the local team member requested the coach. Data 1: **Team** Data1 Type: Team

					Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
021C	540	Volt/Fault Reset Occurred	DAT[MCU]	Extended	The voltage loss and overcurrent indications maintained by the IntelliTEAM II software have been reset after either the Sectionalizer Reset Time or, if a transfer event has occurred, after team reconfiguration is complete. Data 1: **Switch Position** Data1 Type: SwitchPosition Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
021D	541	Coach is Held by Team Member	DAT[MCU]	All	The coach for the specified team is being held by the local team member. This occurs when a process is taking place at the local team member that requires the presence of coaches from both adjacent teams. Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
021E	542	Line Segment Faulted	DAT[MCU]	Normal	The line segment protected by the specified team is the location of the overcurrent fault on the circuit. The team will not attempt to restore service to this line segment. Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
021F	543	IR Opened for Transfer	DAT[MCU]	Normal	During a transfer event, the coach of the specified team opened the switch indicated to allow the transfer operation to continue. This may occur when one or more switches within the team are not coordinated to open at the same time as the other switches. Data 1: **Team** Data1 Type: Team Data 2: **Rec** Data2 Type: SwitchRecord Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0220	544	Ret to Normal Start Event Request	DAT[MCU]	Normal	The Return to Normal timer has expired, allowing the Return to Normal process to start on the specified team. This message indicates that the specified team generated the event. Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0221	545	Return To Normal Disabled at Switch	DAT[MCU]	Normal	The Return to Normal process will not be carried out on the specified team because Return to Normal is disabled on the SETUP: Team screen. Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0222	546	Ret to Normal Timer Started	DAT[MCU]	Normal	The Return to Normal timer was started by the local team member of the specified team. Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort

					Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0223	547	Ret to Normal Start Event Received	DAT[MCU]	Normal	The local team member of the specified team received a request to start the Return to Normal process. This follows the end of the Return to Normal timer and the subsequent event request. Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0224	548	Return to Normal Process Stopped	DAT[MCU]	Extended	The Return to Normal process completed at the local team member with the indicated completion code. For details on the code, contact S&C. Data 1: **Team** Data1 Type: Team Data 2: **Code** Data2 Type: InternalCode Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0225	549	Return to Normal Continue OK	DAT[MCU]	Normal	The internal Return to Normal process for the specified team indicated that Return to Normal may continue to the next step. The process result code is also shown. Data 1: **Team** Data1 Type: Team Data 2: **Code** Data2 Type: InternalCode Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0226	550	Task Travel	DAT[MCU]	All	During a Return to Normal process, tasks associated with the process travel among multiple teams between the normal source and the normal tie point of the circuit. This message traces the path of the tasks. Data 1: **from Team** Data1 Type: Team Data 2: **Team** Data2 Type: Team Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0227	551	Ret to Normal Process UnSuccess	DAT[MCU]	Normal	The internal Return to Normal process for the specified team indicated that Return to Normal cannot continue. This may be caused by a team member that has Return to Normal disabled (Code 7), or by the adjacent source team not yet being in its normal state (Code 6). Data 1: **Team** Data1 Type: Team Data 2: **Code** Data2 Type: InternalCode Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0228	552	Config Update - Operation Suspended	DAT[MCU]	Normal	The team configuration of any of the active local teams is being changed on the SETUP: Team screen. While this change is in progress, team operation is suspended. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
022A	554	Internal Test Point	DAT[MCU]	Normal	A general internal message to display data that may be helpful during diagnostics. Please contact S&C if you see this message. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort

					Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
022B	555	Coach Collect Data	DAT[MCU]	Extended	This message logs the collection of new data by the coach in the specified team. This data collection process occurs during the start of a transfer event. The team record where the coach is going is also shown. Data 1: **Team** Data1 Type: Team Data 2: **Goto Rec** Data2 Type: MemberWithDoneAndEOL Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
022C	556	Coach Hold Override	DAT[MCU]	All	When the team member of the specified team holds the coach for an extended period of time, an override occurs that allows the coach to briefly visit other team members. This prevents the coach from becoming old and regenerated by an adjacent team member. The team record where the coach is going is also shown. Data 1: **Team** Data1 Type: Team Data 2: **Goto Rec** Data2 Type: TeamRecord Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
022D	557	Rebuilding Coach	DAT[MCU]	Normal	The coach for the specified team is being regenerated. This may be caused by a power up event, a configuration change in the team, or a lost coach due to communications error. A diagnostic code is also shown, contact S&C for code details. Data 1: **Team** Data1 Type: Team Data 2:Task identifier Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0230	560	Team Not Ready - Discard Task	DAT[MCU]	All	The indicated task has been discarded because the specified team was not ready to transfer. This is typically the result of a local or team error condition. Data 1: **Team** Data1 Type: Team Data 2: **Task** Data2 Type: Task Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0231	561	SCADA Prohibit Restoration Active	DAT[MCU]	Normal	A SCADA command was received to prevent the restoration of any load by this team member (the switch may not close automatically), however protection is not affected. If applicable, this message will also be displayed on power up. Data 1:Debug Data Data1 Type: PRReason Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0232	562	Timer Prohibit Restoration Active	DAT[MCU]	Normal	The Prohibit Restoration Timer expired, preventing the restoration of load by the team for which the timer expired, however automatic sectionalizing is not affected. If applicable, this message will also be displayed on power-up. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0235	565	Team Communication Error	DAT[MCU]	Normal	A team-related message could not be delivered. Data 1: **Team** Data1 Type: Team

					Data 2: **RTU** Data2 Type: RTUAddress Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0236	566	Monitor Line Segment	DAT[MCU]	All	The specified team has an indication to start a transfer event, but the line segment is still energized. The team monitors the segment until it is deenergized. Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0238	568	Not All Configured Teams Xfer Ready	DAT[MCU]	Normal	At least one of the active teams where the local control is a member is not fully operational. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0239	569	Transfer in Progress on Any Team	DAT[MCU]	Normal	A team is in the process of reconfiguring the circuit and transferring load to an alternate source. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
023A	570	RTN in Progress on Any Team	DAT[MCU]	Normal	A team is presently returning the circuit to its normal configuration. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
023B	571	Adjust Line Segment Count	DAT[MCU]	Extended	Specified team has increased or decreased the line segment count associated with the Line Segment Limit set point, following a transfer event. Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
023C	572	Software Mismatch on Arriving Coach	DAT[MCU]	Normal	There is a software revision incompatibility within the team. The data fields show revision and version information for the team member from which the coach just arrived. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
023D	573	Switch Open - Extended Parallel	DAT[MCU]	Normal	During a closed transition Return to Normal, the team member at a tie switch automatically opened the switch after a prescribed timeout. This insured that a circuit parallel was not left in place indefinitely. This condition is not normal, and may have resulted in load being dropped. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
023E	574	Unexpected State Change	DAT[MCU]	Extended	The transfer state went through an unexpected transition at the specified team. This error might stop an ongoing transfer process.

					Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
023F	575	Loading Data Reset	DAT[MCU]	Extended	When a transfer with a known load value occurs, the IntelliTEAM II software resets the loading data to reflect the new value. This updates the information more quickly than the 2-minute load averaging. The code relates to the state of the reset process. Data 1: **Team** Data1 Type: Team Data 2:Task identifier Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0240	576	Contract Receiver Busy	DAT[MCU]	Extended	A contract agent's receiver buffer was full, so a contract message was dropped. The numbers for the specified agent are associated with the RTU address at the originating team member. Data 1: **Agent** Data1 Type: Agent Data 2: **SwitchPosition** Data2 Type: SwitchPosition Data 3: **Agent** Data3 Type: Agent Data 4:Debug Data Data4 Type: ushort
0241	577	Contract Added to List	DAT[MCU]	All	A new contract was added to the list of contracts being maintained. This message shows both the requesting and granting teams associated with the transfer process. The requesting team (Team 1) identifies the origin of the contract. Data 1: **Agent** Data1 Type: Agent Data 2: **SwitchPosition** Data2 Type: SwitchPosition Data 3:Team Data3 Type: Team Data 4:Team Data4 Type: Team
0242	578	New Contract Addition Issue	DAT[MCU]	Extended	A contract agent tried to add a new contract to its list but could not, so the contract was declined. The number for the specified agent is associated with the RTU address at the originating team member. Data 1: **Agent** Data1 Type: Agent Data 2: **SwitchPosition** Data2 Type: SwitchPosition Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0243	579	Contract Pending Issue	DAT[MCU]	Extended	The requesting contract agent was waiting for a response when the timer ran out, so it the contract was unsuccessful. The coach may restart the contract request if it cannot find another alternate source. This message shows the two teams involved with the transfer process at this team member location, where (Team 1) is the requesting team. Data 1: **Agent** Data1 Type: Agent Data 2: **SwitchPosition** Data2 Type: SwitchPosition Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0244	580	Contract Request Was Declined	DAT[MCU]	Normal	The granting agent declined the contract request. The number for the specified agent is associated with the RTU address at the originating team member. Note that this message can appear at any agent with the contract on its list. Data 1: **Agent** Data1 Type: Agent Data 2:SwitchPosition Data2 Type: SwitchPosition Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort

0245	581	Contract General Error	DAT[MCU]	Extended	The specified contract agent detected a contract error. The number for the agent is associated with the RTU address at the team member. Data 1: **Agent** Data1 Type: Agent Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0246	582	Contract Request Travel	DAT[MCU]	All	A contract request is traveling between teams. (Team 1) is the segment through which the request just came, and (Rec 2) is the team member in the direction where the request is headed. Data 1: **Agent** Data1 Type: Agent Data 2: **Team** Data2 Type: Team Data 3: **TeamRecord** Data3 Type: TeamRecord Data 4:Debug Data Data4 Type: ushort
0247	583	Contract Request Was Accepted	DAT[MCU]	Normal	The granting agent accepted the contract. The number for the specified agent is associated with the RTU address at the originating team member. Data 1: **Agent** Data1 Type: Agent Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0248	584	Contract is Being Dissolved	DAT[MCU]	Extended	An active contract is no longer needed and is in the process of being dissolved. The number for the specified agent is associated with the RTU address at the originating team member. Data 1: **Agent** Data1 Type: Agent Data 2: **SwitchPosition** Data2 Type: SwitchPosition Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0249	585	Contract Started by Member	DAT[MCU]	All	A member of the specified team has determined that it can close based on information from the coach, but it must first request a contract. Data 1: **Agent** Data1 Type: Agent Data 2: **SwitchPosition** Data2 Type: SwitchPosition Data 3: **Team** Data3 Type: Team Data 4: **TeamRecord** Data4 Type: TeamRecord
024A	586	Contract Approved Switch Close	DAT[MCU]	Normal	The specified team requested a contract, which then traveled to the granting agent, was approved, and came back. The switch has closed to energize the line segment. Data 1: **Agent** Data1 Type: Agent Data 2: **SwitchPosition** Data2 Type: SwitchPosition Data 3: **Team** Data3 Type: Team Data 4:Debug Data Data4 Type: ushort
024B	587	Contract Declined	DAT[MCU]	Normal	The contract request made by the specified team was declined. Data 1: **Agent** Data1 Type: Agent Data 2: **SwitchPosition** Data2 Type: SwitchPosition Data 3: **Team** Data3 Type: Team Data 4:Debug Data Data4 Type: ushort
024C	588	Contract Requested by Member	DAT[MCU]	Normal	The local team member has requested that the contract agent negotiate a contract on behalf of the specified team. Data 1: **Agent** Data1 Type: Agent Data 2: **SwitchPosition** Data2 Type: SwitchPosition

					Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
024D	589	Contract Requires Member Wait	DAT[MCU]	All	The specified team is waiting for a contract to be requested, granted, or declined. Data 1: **Agent** Data1 Type: Agent Data 2: **SwitchPosition** Data2 Type: SwitchPosition Data 3: **Team** Data3 Type: Team Data 4:Debug Data Data4 Type: ushort
024E	590	Contract Communication Received	DAT[MCU]	All	The contract agent has received a message. (Team 1) refers to the contract's originating segment, and (Team 2) refers to the temporary segment, usually the segment through which the message just passed. Data 1: **Agent** Data1 Type: Agent Data 2: **SwitchPosition** Data2 Type: SwitchPosition Data 3:Debug Data Data3 Type: ushort Data 4: **ContractState** Data4 Type: ContractState
024F	591	Contract Maintained	DAT[MCU]	All	Scheduled maintenance of a contract was performed by the specified requesting agent to confirm the continued need for the contract. The number for the agent is associated with the RTU address at the team member. Data 1: **Agent** Data1 Type: Agent Data 2: **SwitchPosition** Data2 Type: SwitchPosition Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0250	592	Duplicate Contract Received	DAT[MCU]	All	The specified requesting agent received an old or duplicate contract message, which refers to the indicated contract state. The number for the agent is associated with the RTU address at the team member. Data 1: **Agent** Data1 Type: Agent Data 2: **SwitchPosition** Data2 Type: SwitchPosition Data 3: **ContractState** Data3 Type: ContractState Data 4:Debug Data Data4 Type: ushort
0251	593	Contract Transmit Busy	DAT[MCU]	All	A contract agent's transmit buffer was full. The message is held until the transmit buffer has space, and is then sent. The number for the specified agent is associated with the RTU address at the originating team member. Data 1: **Agent** Data1 Type: Agent Data 2: **SwitchPosition** Data2 Type: SwitchPosition Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0252	594	Contract Dissolved by Member	DAT[MCU]	Extended	The local team member has started the process to dissolve an active contract on behalf of the specified team. Data 1: **Agent** Data1 Type: Agent Data 2: **SwitchPosition** Data2 Type: SwitchPosition Data 3: **Team** Data3 Type: Team Data 4:Debug Data Data4 Type: ushort
0253	595	Contract Resource Limitation	DAT[MCU]	Normal	A contract agent found that resources were not available for load transfer, because of either segment limitations (Code 2) or capacity limitations (Code 3). The contract agent did not forward the contract any further. Data 1: **Agent** Data1 Type: Agent Data 2: **ushort** Data2 Type: ushort

					Data 3: **ushort** Data3 Type: ushort Data 4: **ushort** Data4 Type: ushort
0254	596	Contract Cannot Travel	DAT[MCU]	All	The requesting contract agent does not know where the present source is, so it could not forward the contract request. The contract failed. The number for the specified agent is associated with the RTU address at the team member. Data 1: **Agent** Data1 Type: Agent Data 2: **SwitchPosition** Data2 Type: SwitchPosition Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0255	597	Contract Not Found	DAT[MCU]	All	A contract agent received a message about a contract that is not in its list. This may result in the contract being dissolved and, if necessary, reactivated. The number for the specified agent is associated with the RTU address at the originating team member. Data 1: **Agent** Data1 Type: Agent Data 2: **SwitchPosition** Data2 Type: SwitchPosition Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0256	598	Contract Reactivated	DAT[MCU]	Extended	The contract is missing somewhere along its routing path, so the requesting agent reactivated the contract. The number for the specified agent is associated with the RTU address at the originating team member. Data 1: **Agent** Data1 Type: Agent Data 2: **SwitchPosition** Data2 Type: SwitchPosition Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0257	599	Alternate Source Flag Cleared	DAT[MCU]	Extended	The line segment associated with the specified team is no longer being fed from an alternate source. This message usually follows a Return to Normal operation. Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0258	600	Member Cleared Task Lock Attributes	DAT[MCU]	All	The team member logic cleared the execution lock on tasks present on the task list. These tasks may now be executed by the team member. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0259	601	Pending Comm Message Cleared	DAT[MCU]	All	The coach has determined that a pending message is no longer valid, and should be removed from the communications transmit list. Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
025A	602	Prohibit Restoration Timer Expired	DAT[MCU]	Normal	The timer for the Prohibit Restoration feature has expired and will cause Prohibit Restoration to become active. (Team 1) indicates the team number to which this event applies. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort

					Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
025B	603	Action Path Complete	DAT[MCU]	All	This message is displayed when the action path for operating the switch gear has completed all possible steps in either the forward or reverse direction. Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
025C	604	Next Action	DAT[MCU]	All	The operation of the switch gear is progressing to the next action within the action path. (Action 1) indicates the action to be taken and can be one of the following codes: 3 Close for xfer, 20 Contract request, 21 Contract Terminate, 30 Block recloser, 31 Unblock recloser, 33 Block ground trip, 34 Unblock ground trip, 36 Alternate settings, 37 Normal, 253 Action path done. (Direction 2) is the direction the action path is going, either Forward (1) or Reverse (2). Data 1: **Action** Data1 Type: Action Data 2: **Direction** Data2 Type: Direction Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
025D	605	Control Feature OK	DAT[MCU]	Extended	Indicates the requested control feature executed normally. Possible point values are: 1 Point to operate switch, 2 Point to block reclosing, 3 Point to block ground trip, 4 Point to change profile. Data 1: **Team** Data1 Type: Team Data 2: **Point** Data2 Type: Point Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
025E	606	Control Feature Unsuccessful	DAT[MCU]	Normal	Indicates the requested control feature did not execute normally. Data2 Points: 1= Operate IntelliRupter, 2= Block reclosing, 3= Block ground trip, 4= Change profile. Data 1: **Team** Data1 Type: Team Data 2: **Point** Data2 Type: Point Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
025F	607	Alternate Source Flag Set	DAT[MCU]	Normal	Alternate Source Flag Set. Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0264	612	Volt/Fault Idle Transfer State	DAT[MCU]	All	This message is output when all teams that the IntelliRupter is a member of have their transfer stated back to idle, signaling a reset of the total 3 phase average load. Data 1: **Switch Position** Data1 Type: SwitchPosition Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0266	614	Volt/Fault Overcurrent Cleared	DAT[MCU]	All	This message is output when an overcurrent fault was previously detected, the field now is not faulted and 3 phase voltage has returned, causing the coach to clear the latched overcurrent condition. For details on (Rec 2) contact S&C. Data 1: **Team** Data1 Type: TeamRecord

					Data 2: **Rec** Data2 Type: SwitchRecord Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0267	615	Volt/Fault Voltage Loss Cleared	DAT[MCU]	All	The coach clears a 3 phase voltage loss when: 3 phase voltage loss was previously detected and real time 3 phase voltage is now present and either the external device is in its normal state or the external device's normal job is a source sub. For details on Rec 2, contact S&C. Data 1: **Team** Data1 Type: TeamRecord Data 2: **Rec** Data2 Type: SwitchRecord Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0268	616	Volt/Fault Phase Loss Cleared	DAT[MCU]	All	This message is output when a phase loss was previously detected, the external device is now in its normal open or close state, real time 3 phase voltage is present, causing the coach to clear the latched phase loss condition. For details on (Rec 2) contact S&C. Data 1: **Team** Data1 Type: TeamRecord Data 2: **Rec** Data2 Type: SwitchRecord Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0269	617	DNP Feeder Loading Data Received	DAT[MCU]	All	Feeder loading data has been received from the source substation or breaker, and may be used in determining the capacity of the circuit during transfer operations. Data 1 indicates the circuit loading received in increments of 10 amps per count. Data 1: **Data** Data1 Type: LoadingCurrent Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
026A	618	Error Cleared - Gathering Data	DAT[MCU]	Normal	The error collecting data related to the internal switch function was cleared. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
026B	619	IntelliRupter is Ready for Transfer	DAT[MCU]	Normal	The local switch on the specified team is ready for transfer operations. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
026C	620	Config Update Operation Resumed	DAT[MCU]	Normal	The team configuration of any of the active local teams has been re-enabled on the SETUP: Team screen. Team operation is resumed. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
026D	621	SCADA Prohibit Restoration Cleared	DAT[MCU]	Normal	A SCADA command was received to reenable the restoration of load by this team member, and the switch may be closed automatically. If applicable, this message will also be displayed on power up. Data 1:Debug Data Data1 Type: ushort

					Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
026E	622	Timer Prohibit Restoration Cleared	DAT[MCU]	Normal	A SCADA command was received to reenable the restoration of load by this team member, and the switch may be closed automatically. If applicable, this message will also be displayed on power up. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
026F	623	All Teams Are Transfer Ready	EVT[MCU]	Normal	All teams are fully operational, and may close switches as necessary to transfer load and reconfigure the circuit. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0270	624	Transfer Not Active on Any Team	DAT[MCU]	Normal	No teams are presently reconfiguring the circuit or transferring load. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0271	625	RTN Not Active on Any Team	DAT[MCU]	Normal	No teams are presently returning the circuit to its normal configuration. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0272	626	Unknown Message Type Received	DAT[MCU]	Normal	An IntelliTEAM message was received over communications but contains a message type that is not recognized. The team the message was intended for, and the message type received, are included in the data. Data 1: **Team** Data1 Type: Team Data 2: **Message Type Received** Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0273	627	Request Xfer Trip Prohibit Restoration	DAT[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0274	628	Req Xfer Trip Prohibit Rest on DG Team	DAT[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0275	629	Xfer Trip Prohibit Restoration Active	DAT[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort

					Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0276	630	Xfer Trip Prohibit Restoration Cleared	DAT[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0277	631	DG Reconnect Delay Started	DAT[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0278	632	DG Reconnect Delay Expired	DAT[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0279	633	Not All Prohibit Rest Flags Cleared	DAT[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
027A	634	Request Switch Close For DG Reconnect	DAT[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
027B	635	Switch Closed For DG Reconnection	DAT[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
027C	636	DG Reconnect Delay Terminated	DAT[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
027D	637	DG Reconnect Delay Disabled	DAT[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
027E	638	DG Reconnect Delay Counting Down	DAT[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
027F	639	Start Monitoring TTPR	DAT[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort

					Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0280	640	Continue Monitoring TTPR	DAT[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0281	641	Could Not Find DG	DAT[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0282	642	Could Not Find Normal Source	DAT[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0283	643	Stop Monitoring TTPR	DAT[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0284	644	Source Side Team Not Defined	DAT[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0285	645	Could Not Start Monitoring TTPR	DAT[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0287	647	Transfer Declined	DAT[MCU]	Normal	Data 1: **Team** Data1 Type: Team Data 2: **ExcessLoad** Data2 Type: ExcessLoad Data 3: **Unused** Data3 Type: ushort Data 4: **Debug Data** Data4 Type: HealingType
0288	648	Transfer Declined Excess Load Inactive	DAT[MCU]	Normal	Data 1: **Team** Data1 Type: Team Data 2: **Debug Data** Data2 Type: XferInactiveReason Data 3: **Unused** Data3 Type: ushort Data 4: **Unused** Data4 Type: ushort
0289	649	Transfer Declined	DAT[MCU]	Normal	Data 1: **Team** Data1 Type: Team Data 2: **LineSegLimit** Data2 Type: LineSegLimit Data 3: **Unused** Data3 Type: ushort Data 4: **Debug Data** Data4 Type: HealingType

028A	650	Transfer Declined Line Seg Limit Off	DAT[MCU]	Normal	Data 1: **Team** Data1 Type: Team Data 2: **Debug Data** Data2 Type: XferInactiveReason Data 3: **Unused** Data3 Type: ushort Data 4: **Unused** Data4 Type: ushort
028D	653	DG Reconnect Delay Terminated Cleared	DAT[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0290	656	Normally Open Switch Automatic Open	DAT[MCU]	Normal	A normally open team member has opened for an automatic (IntelliTEAM-initiated) reason. This may happen during Return To Normal process. The team and the member record number are provided. Data 1: **Team** Data1 Type: Team Data 2: **Rec** Data2 Type: SwitchRecord Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0291	657	DNP Message Rejected	DAT[MCU]	Normal	An IntelliTEAM communication message to the provided RTU was rejected by communications. The rejection code is provided. Data 1: **Rtu** Data1 Type: RTUAddress Data 2: **Code** Data2 Type: CommErrorCode Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0292	658	Transfer State Change	DAT[MCU]	All	The transfer state changed for the specified team. Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0293	659	Manual Operation Team Condition On	DAT[MCU]	Normal	A team entered a non-operational state because an unexpected manual switch operation occurred. Typically the only expected manual switch operation is closing a source switch on a previously faulted team which proves that the fault is gone, and allows RTN process to take place (if RTN is enabled). Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0294	660	Manual Operation Team Condition OFF	DAT[MCU]	Normal	The unexpected manual switch operation team condition was cleared. This can only occur as a result of a user request. Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0295	661	Manual Operation Not Cleared	DAT[MCU]	Normal	Manual Operation condition could not be cleared on a user request because the local team member is not in its normal state. Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort

0296	662	Wait For Team to Open	DAT[MCU]	Normal	IntelliTEAM is waiting for all switches in the team to open so that it can attempt to restore service to the team. This is likely to occur only during a 2nd contingency event. Data 1: **team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0297	663	Bad Voltage Reopen Flag	DAT[MCU]	Normal	Associated with the Team Member Requalify Time feature. Value of 1 means that the team member is disqualified on an unsuccessful attempt to close and a timer is started. Value of 0 means that the timer has cleared, and the team member can be considered as an alternate source again. Data 1: **Team** Data1 Type: Team Data 2: **Flag value** Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0298	664	ITII Source Loading Data Active	DAT[MCU]	Normal	
0299	665	ITII Source Loading Data Not Active	DAT[MCU]	Normal	
029A	666	ITII RT-Load Data Problem	DAT[MCU]	Normal	
029B	667	ITII RT-Load Data Problem Cleared	DAT[MCU]	Normal	
029C	668	ITII Cycling Stat Cleared(team rec)	DAT[MCU]	Normal	Data 1: **Team** Data1 Type: TeamRecord Data 2: **Rec** Data2 Type: SwitchRecord
029D	669	Team 1 is Ready to Transfer	EVT[MCU]	Extended	
029E	670	Team 1 is in Not Ready state	EVT[MCU]	Extended	
029F	671	Team 2 is Ready to Transfer	EVT[MCU]	Extended	
02A0	672	Team 2 is in Not Ready state	EVT[MCU]	Extended	
02A1	673	Team 3 is Ready to Transfer	EVT[MCU]	Extended	
02A2	674	Team 3 is in Not Ready state	EVT[MCU]	Extended	
02A3	675	Team 4 is Ready to Transfer	EVT[MCU]	Extended	
02A4	676	Team 4 is in Not Ready state	EVT[MCU]	Extended	
02A5	677	Team 5 is Ready to Transfer	EVT[MCU]	Extended	
02A6	678	Team 5 is in Not Ready state	EVT[MCU]	Extended	
02A7	679	Team 6 is Ready to Transfer	EVT[MCU]	Extended	
02A8	680	Team 6 is in Not Ready state	EVT[MCU]	Extended	
02A9	681	Team 7 is Ready to Transfer	EVT[MCU]	Extended	

02AA	682	Team 7 is in Not Ready state	EVT[MCU]	Extended	
02AB	683	Team 8 is Ready to Transfer	EVT[MCU]	Extended	
02AC	684	Team 8 is in Not Ready state	EVT[MCU]	Extended	
02AD	685	RSH start after switch open	DAT[MCU]	All	Rapid Self Healing is being started after a switch has opened to isolate trouble. Data 1: **Team** Data1 Type: ushort
02AE	686	RSH error - downstream team	DAT[MCU]	All	Rapid Self Healing was unable to restore load based on information from a team on the load side of the fault. Data 1: **Team** Data1 Type: ushort
02AF	687	RSH error - faulted team	DAT[MCU]	All	Rapid Self Healing was unable to restore load based on the information from the faulted team. Data 1: **Team** Data1 Type: ushort
02B0	688	RSH monitoring in process	DAT[MCU]	All	Indicates that a coach monitoring task was started to watch the progress of the Rapid Self Healing process. This task will be used to revert back to a standard restoration process if Rapid Self Healing is unable to restore the load. Data 1: **Team** Data1 Type: ushort
02B1	689	RSH has become active	DAT[MCU]	All	Logged when the coach is requested to make Rapid Self Healing active in that team. Data 1: **Team** Data1 Type: ushort
02B2	690	RSH has become inactive	DAT[MCU]	All	Logged when the coach is requested to make Rapid Self Healing inactive in that team. Data 1: **Team** Data1 Type: ushort
02B3	691	RSH is being started by player	DAT[MCU]	All	Logged when the coach has requested the team member to initiate the Rapid Self Healing process. Data1= Team Number, Data2= RSH Team. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02B4	692	RSH error - reported by player	DAT[MCU]	All	If the team member finds that Rapid Self Healing is unable to compolete it will log this message. If there are other tie points that may be used for RSH it will try those, indicated tby the Try Number. The result code may be one of: (if code location 0 or 2) 1= No Alternate Source, 2= Not Enough Capacity, 3= Switch Trouble, 4= Timer Unavailable, 5= Unable to Register Peer, 6= Comm List Full, 7= Bad Try Number, 8= Bad Netlist, 9= Not RSH Enabled. (if code location 1) 3=Problem while waiting for RSH, 4= Timeout while waiting for RSH. Data1= Team Number, Data2= Result Code, Data3= Try Number, Data4= Code Location. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02B5	693	RSH action requested by player	DAT[MCU]	All	The member's initial request to start Rapid Self Healing was successful. Data1= Team Number.

					Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02B6	694	RSH action successful	DAT[MCU]	All	The team member has received an indication that Rapid Self Healing has been successful. Success code will be 2. Data1= Team Number, Data2= Success Code. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02B7	695	RSH action taking place	DAT[MCU]	All	The team member has initiated a Rapid Self Healing operation and is waiting for a result. Data1= Team Number. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02B8	696	RSH init at startup	DAT[MCU]	All	A peer device was unable to be registered with the DNP commuynication system. The return code can be: 1= Error, 2= Already On List, 3= List Full, 4= Not On List, 5= Not Peer-To-P{eer Compatible, 6= Delay Before Retrying. Data1= Return Code, Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02B9	697	RSH timer was not available	DAT[MCU]	Normal	Logged during startup if no timer is available for the Rapid Self Healing process. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02BA	698	RSH disabled or switch trouble	DAT[MCU]	All	If the switch is in manual mode, or IntelliTEAM event processig has not yet been in the associated teams, this message will be logged and Rapid Self Healing will not be allowed. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02BB	699	RSH trouble registering DNP peer	DAT[MCU]	All	A peer device was unable to be registered with the DNP communication system. The return code can be: 1= Error, 2= Already On List, 3= List Full, 4= Not On List, 5= Not Peer-to-Peer Compatible, 6= Delay Before Retrying. Data1= Return Code, Data2= Peer Address, Data4= Code Location. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02BC	700	RSH throw back operation	DAT[MCU]	All	This indicates that the tie switch has completed its Rapid Self Healing operation and sending a response message back to the originating switch. The status can be: 6= Success, 7= Unable to Close Switch. Data1= Tie Switch Address, Data2= Originating Switch Address, Data3= RSH Status.

					Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02BD	701	RSH peer removed after complete	DAT[MCU]	All	The reported switch address has been removed from the DNP peer communications peer association list. Data1= Switch address. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02BE	702	RSH trouble starting operation	DAT[MCU]	All	Rapid Self Healing was unable to begin due to one of the following reasons: 1= No Alternate Source, 2= Not Enough Capacity, 3= Switch Trouble, 4= Timer Unavailable, 5= Unable to Register Peer, 6= Comm List Full, 7= Bad Try Number, 8= Bad Netlist, 9= Not RSH Enabled. Data1= Trouble Code. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02BF	703	RSH initiated	DAT[MCU]	All	Logged at the originating team member when Rapid Self Healing has been initiated successfully. The message sent to the tie point includes the number of teams that will be restored, and the amount of load that will be restored, if the RSH action is executed at the tie switch. A response is then expected to find out whether the tie switch was able to close. Data1= Tie Switch Address, Data2= Tie Switch Position, Data3= Number of Teams, Data4= Load to Restore. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02C0	704	RSH switch operation trouble	DAT[MCU]	All	Logged if the tie switch location is unable to close the switch. The specific reason for this trouble is related to the code location: 1= Rapid Self Healing Inactive, 2= Request Team Invalid, 3+4= RSH Disabled on Team, 5+6= Team Errors Present, 7= Switch Is Not Open, 8= Voltage State Issue, 9= Team Is Faulted, 10= Too Many Teams to Restore, 11+12= Not Enough Capacity, 13= Coach Task List Full, 14= Grant Team Invalid. Contact S&C for further definitions of Data1, Data2, and Data3. Data4= Code Location. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02C1	705	RSH switch op final status	DAT[MCU]	Normal	Indicates the status of operating a switch based on Rapid Self Healing. Switch operation status includes: 1= Good Operation, 2= Bad Operation, 3= Operation Timed Out. The RSH process status can be: 4= Timeout, 6= Good Status, 7= Bad Status. Data1= Switch Operation Status, Data2= RSH Process Status, Data4= Code Location. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02C2	706	RSH rcvd unexpected state	DAT[MCU]	All	Logged if a Rapid Self Healing message is received that contains a state that conflicts with the present local RSH state. In general, if

		change			RSH is idle then a request to close may be accepted, and if a request to close has been transmitted then only a result response message can be accepted. RSH states include: 1= Idce, 2= Waiting, 3= Error, 4= Timeout, 5= Close Switch, 6= Result Response, 7= Remove Peer, 8= Waiting, 9= Responding. Data1= Present RSH State, Data2= Received RSH State, Data3= Present RSH Status. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02C3	707	Netlist initialization trouble	DAT[MCU]	Normal	If a Netlist is unable to be imported into the Team database this message is logged to indicate the reason. Data1= Trouble Code (1= Present states of local switches do not match normal states, 2= IntelliTEAM may be in the process of reconfiguration, 3= Netlist data is invalid, such as no local teams, 4= Presently processing a new netlist, 5= Device is not configured with an RTU address). Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02C4	708	Netlist accepted by IntelliTEAM	DAT[MCU]	Normal	Indicates that a Netlist was successfully imported into the Team Database. The count of the number of teams included is also reported. Data1= Team Count. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02C5	709	Netlist rejected by IntelliTEAM	DAT[MCU]	Normal	During import into the team database the Netlist was rejected either due to this device not being included in the Netlist, or trouble with the data while unpacking the Netlist. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02C6	710	RSH alt source search result	DAT[MCU]	Extended	Logged when the Rapid Self Healing process searches for alternate sources during a reconfiguration process. The number of possible alternate sources Found is reported, along with the number Available for restoration after checking each alternate source for available capacity. Data1= Found, Data2= Available. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02C7	711	Loading Agent Timer Unavailable	DAT[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02C8	712	Load Shedding Initiated	DAT[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort

					Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02C9	713	Trouble Starting Load Shedding	DAT[MCU]	Normal	A new coach has been generated at a team member of the specified team. This can occur during power-up, if existing coach is lost due to communication error, or existing coach data is inconsistent. Data1= Team. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02CA	714	Recvd Shed Rqst While in Process	DAT[MCU]	Extended	Indicates that a request to shed load was received while a previous request is in process. Data1= State (1= Start, 2= Return Response, 3= Cleanup, 4= Remove Peer, 5= Back to Normal, 65535= Idle), Data2= Target. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02CB	715	Trouble During Shed Operation	DAT[MCU]	Extended	Indication of trouble during shed operations is dependent on the Code Location. Code Location 1 indicates the target switch is not presently closed (Data1 indicates switch state). Code Location 2 indicates associated team numbers are inconsistent (Data1 and Data2 are actual team numbers, Data3 is the requested team number). Code Location 3 indicates that team errors may be present (Data1 and Data2 are associated team numbers). Code Location 6 indicates that the priority of the load to be shed is too high to shed (Data1 shows the configured load priority). Code Location 7 indicates that there was trouble returning a load shed response message (Data1 is the destination address). Data1, Datas2, and Data3 see above. Data4= Code Location. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02CC	716	Load Agent Throwback Operation	DAT[MCU]	All	A load shed response message was sent back to the requesting device. The destination address is included. Data1= Destination. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02CD	717	Load Agent Trouble Adding DNP Peer	DAT[MCU]	Extended	This is logged when a destination device for a load shed message is unable to be added (code location 2) or removed (code location 1) from the DNP peer list Data1= Return Code (1= Error, 2= Already on list, 3= list full, 4= not on list) Data2= Destination, Data4= Code Location. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02CE	718	Load agent removed DNP peer	DAT[MCU]	All	A destination peer device was successfully removed from the DNP peer list after a load shed operation was completed. This prevents the peer list from filling up over time. Data1= Destination. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort

					Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02CF	719	Load agent remove restrictions	DAT[MCU]	Extended	Indicates that a switch that was used to shed load can again be used as a source for that load. The restriction from closing has been removed. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02D0	720	Load Shedding Switch Mode Status	DAT[MCU]	All	This is logged to show whether the Switch Mode status indicates that the team member is being blocked from operations due to a load shed operation. Data1= Team Number, Data2= Member Number, Data3= State (1= Transition to On, 2= Transition to Off). Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02D1	721	Overload monitoring started	DAT[MCU]	Normal	Indicates beginning of load monitoring for the substation associated with this control since it is supplying sections that it normally does not supply. Data1= Source List Index in Net View. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02D2	722	Overload monitoring stopped	DAT[MCU]	Normal	Indicates that load monitoring is no longer required for this source, since it is no longer carrying non-normal sections. Data1= Source List Index in Net View, Data2= Source Capacity, Data3= Present Load. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02D3	723	Qualified Overload is present	DAT[MCU]	All	Indicates that an overload condition has been present for the specified length of time - this is the declaration we are not seeing a momentary transient. Data1= Source List Index in Netview, Data2= Source Capacity, Data3= Present Load. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02D4	724	Overload Alarm Active	DAT[MCU]	Normal	Alarm is active once an overload has been declared. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02D5	725	Overload Alarm Removed	DAT[MCU]	Normal	Overload Condition has cleared and/or the source is no longer carrying extra sections. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort

02D6	726	Load shed sequence started	DAT[MCU]	Extended	Indicates that the time on alarm state limit has passed, and an attempt will be made for a section to be transferred or shed to attempt to allieviate the condition. Data1= Source List Index in Net View, Data2= Source Capacity, Data3= Present Load. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02D7	727	Load shed request sent	DAT[MCU]	All	Shed request was sent to the specified RTU address. Data1= Destination Switch RTU, Data2= Destination Switch Team Number, Data3= Load Request. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02D8	728	Load shed request not sent	DAT[MCU]	All	Problem with communications prevented sending a shed request to the specified RTU address. Data1= Destination Switch RTU, Data2= Destination Switch Team Number, Data3= Load Request. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02D9	729	Load shed request accepted	DAT[MCU]	All	Target RTU address device accepted the request and will act on it. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02DA	730	Load shed request rejected	DAT[MCU]	All	Target RTU address device rejected the request and will not act on it. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02DB	731	Add to shed reject list	DAT[MCU]	All	Target RTU address will not be asked again during this overload occurrence. Data1= Destination RTU address Data2= Quantity in list. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02DC	732	Calculated alt source capacity	DAT[MCU]	All	This message indicates the resources that are available on an alternate feeder as calculated during the RSH process. Data1= Return Code (0= Nodata, 1= Netlist update occurring, 2= Netlist good), Data2= Capacity, Data3= Segment Count, Data4= Netlist Team ID. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02DD	733	Close Error - Pulsing In-Op	DAT[MCU]	All	Data 1:Debug Data Data1 Type: ushort

					Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02DE	734	ITeam decided to open switch	DAT[MCU]	All	Indicates decision by IT to open a switch (for Instant Replay) Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02E0	736	Team Dropped for Load Shed	DAT[MCU]	Normal	The team has been deenergized to reduce substation loading and will not be restored until the circuit is back to normal. Data 1:Debug Data Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02E1	737	PR due to Load Shed Active	DAT[MCU]	Normal	Prohibit Restoration is active to prevent shed load from being restored from an alternate source. Data 1:Debug Data Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02E1	737	Switch 2 not in normal state active	DAT[MCU]	All	Switch 2 not in normal state active Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02E2	738	PR due to Load Shed InActive	DAT[MCU]	Normal	Prohibit Restoration is inactive to prevent shed load from being restored from an alternate source. Data 1:Debug Data Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02E2	738	Sw 2 not in normal state inactive	DAT[MCU]	All	Switch 2 not in normal state inactive Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02E3	739	Switch Open For Phase Isolation ON	DAT[MCU]	Normal	Switch Opened For Phase Isolation Active Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
02E4	740	Switch Open For Phase Isolation OFF	DAT[MCU]	Normal	Switch Opened For Phase Isolation NOT Active Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
02E5	741	Phase Loss Isolation Infrom Mode ON	DAT[MCU]	Normal	Phase Loss Isolation Inform Mode Active Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort

					Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
02E6	742	PLI Inform Mode OFF	DAT[MCU]	Normal	Phase Loss Isolation Inform Mode NOT Active Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
02E7	743	Phase Loss Timing Complete	DAT[MCU]	Normal	Phase Loss Timing Complete Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
02E8	744	Phase Loss Isolation Event Continue	DAT[MCU]	Normal	Phase Loss Isolation Event Continue Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
02E9	745	Sw1 Auto Manl Op. Clear Timer Started	DAT[MCU]	Normal	Sw1 Auto Manual Operation Clearing Timer Started Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
02EA	746	Xfer Declined Load Data	DAT[MCU]	Normal	Xfer Declined Load Data Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
02ED	749	Load Shed Alarm Active	DAT[MCU]	Normal	Alarm is active once arequirement to shed load been declared. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02EE	750	Sys Voltage Classification Diff Detected	DAT[MCU]	Normal	Alarm is active once arequirement to shed load been declared. Data 1:Debug Data Data1 Type: SystemVoltage Data 2:Debug Data Data2 Type: SystemVoltage Data 3:Debug Data Data3 Type: MoreThanOneDiffFound Data 4:Debug Data Data4 Type: ushort
02EF	751	Load Shed Alarm Removed	DAT[MCU]	Normal	No longer need to shed load - load is below the limit or back to normal for Feeder Configuration. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02F0	752	Return to Loop Timer Started	DAT[MCU]	Normal	The Return to Loop timer was started by the local team member of the specified team. Data 1: **Team** Data1 Type: Team Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort

02F1	753	Return to Loop Continue OK	DAT[MCU]	Normal	The internal Return to Loop process for the specified team indicated that Return to Loop may continue to the next step. The process result code is also shown. Data 1: **Team** Data1 Type: Team Data 2: **Code** Data2 Type: InternalCode Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02F4	756	OC Indication Requires Clearing	DAT[MCU]	Normal	OC Indication Requires Clearing Data 1:Debug Data Data1 Type: TeamNumber Data 2:Debug Data Data2 Type: SWPos Data 3:Debug Data Data3 Type: TransferState Data 4:Debug Data Data4 Type: ushort
02F7	759	Average Loading Stopped	DAT[MCU]	Normal	Average Loading Stopped Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02F8	760	Average Loading Restored	DAT[MCU]	Normal	Average Loading Restored Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02F9	761	Calculated Real Capacity	DAT[MCU]	Normal	Calculated Real Capacity Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02FA	762	Not All Teams Xfer Rdy Timer Active	DAT[MCU]	Normal	Not All Teams Xfer Rdy Timer Active Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02FB	763	Not All Teams Xfer Rdy Timer Cleared	DAT[MCU]	Normal	Not All Teams Xfer Rdy Timer Cleared Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02FC	764	Start Sending Transfer Trip	DAT[MCU]	Normal	Start Sending Transfer Trip Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02FD	765	Transfer Trip Sending Rejected by RTL	DAT[MCU]	Normal	Transfer Trip Sending Rejected by RTL Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02FE	766	Transfer Trip Sent Successfully	DAT[MCU]	Normal	Transfer Trip Sent Successfully Data 1:Debug Data Data1 Type: ushort

					Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
02FF	767	Transfer Trip Sent Unsuccessfully	DAT[MCU]	Normal	Transfer Trip Sent Unsuccessfully Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0300	768	Compact Flash Operational Issue	LOG[MCU]	All	Data 1:Error Code Data1 Type: ushort
0301	769	Logging Overflow (last events)	LOG[MCU]	All	Data 1: **Event ID** Data1 Type: ushort Data 2: **Event ID** Data2 Type: ushort Data 3: **Event ID** Data3 Type: ushort Data 4: **Event ID** Data4 Type: ushort
0302	770	LOG DNP Irregularity	LOG[MCU]	All	Data 1:Trace Info Data1 Type: ushort Data 2:Error Code Data2 Type: ushort
0305	773	High Volume Event Storage to CF	LOG[MCU]	All	The task that writes the compact flash file has been rescheduled to run immediately because the event log input buffer is full.
0307	775	Invalid Log Request	LOG[MCU]	All	Data 1:Trace Info Data1 Type: ushort
0308	776	Diag. Data Definition Error	LOG[MCU]	Normal	Data 1: **Diagnostic Data Type (Alarm or Warning or Error)** Data1 Type: LOGDiagType Data 2:On-Event handle Data2 Type: ushort Data 3:Off-Event handle Data3 Type: ushort Data 4:Trace Info Data4 Type: ushort
0309	777	Diag. Data Processing Error	LOG[MCU]	Normal	Data 1: **Diagnostic Data Type (Alarm or Warning or Error)** Data1 Type: LOGDiagType Data 2:Debug Data2 Type: ushort Data 3:Debug Data3 Type: ushort Data 4:Trace Info Data4 Type: ushort
030A	778	Alarm Condition is ON	LOG[MCU]	Normal	
030B	779	Alarm Condition is OFF	LOG[MCU]	Normal	
030C	780	Warning Condition is ON	LOG[MCU]	Normal	
030D	781	Warning Condition is OFF	LOG[MCU]	Normal	
0310	784	Next Averaging Period	LOG[MCU]	All	Data 1:Period Number Data1 Type: ushort
0311	785	Averaging Data CF Write	LOG[MCU]	All	Data 1:File Cycle Number Data1 Type: ushort
0312	786	Next Daily High/Low Period	LOG[MCU]	All	

					Data 1:Period Number Data1 Type: ushort
0313	787	Daily High/Low CF Write	LOG[MCU]	All	Data 1:File Cycle Number Data1 Type: ushort
0314	788	Shutdown Processing LOG	LOG[MCU]	Normal	Data 1:Trace Info Data1 Type: ushort
0315	789	Communication Proc Startup	EVT[MCU]	Normal	
0316	790	Spec. Evt Counters Cleared	LOG[MCU]	Normal	
0317	791	Status Counters Cleared	LOG[MCU]	Normal	
0318	792	Log Flooding Condition ON	LOG[MCU]	Normal	One or more events have stopped being recorded because they were flooding the log. Data 1:event ID Data1 Type: ushort
0319	793	Log Flooding Condition OFF	LOG[MCU]	Normal	No events have stopped being recorded because they were flooding the log.
0320	800	CF Query Action	LOG[MCU]	All	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
0321	801	CF Query Received	LOG[MCU]	All	Data 1: **Client-generated query code** Data1 Type: ushort
0322	802	CF Query Frame Furnished	LOG[MCU]	All	Data 1: **Next Frame Sequence Number** Data1 Type: ushort Data 2: **Position in CF read buffer** Data2 Type: ushort Data 3: **Number of events in this frame** Data3 Type: ushort
0333	819	CF Query New Frame Rqst	LOG[MCU]	All	Data 1: **Frame Sequence Number** Data1 Type: ushort
0334	820	CF Query: Last Frame Furnished	LOG[MCU]	All	Data 1: **Next Frame Sequence Number** Data1 Type: ushort Data 2: **Position in CF read buffer** Data2 Type: ushort Data 3: **Number of events in this frame** Data3 Type: ushort
0335	821	CF Query Abort Request	LOG[MCU]	All	Data 1: **Frame Sequence Number** Data1 Type: ushort
0336	822	CF Query Has Timed Out	LOG[MCU]	All	
0337	823	CF Query Disk Issue	LOG[MCU]	All	Data 1: **Issue Code** Data1 Type: ushort Data 2: Data2 Type: ushort
0400	1024	Digital IO Initialized	BMS[MCU]	Normal	
0401	1025	BMS:AC Power Present	BMS[MCU]	All	Data 1:Temperature Data1 Type: short Data 2:Battery Voltage Data2 Type: ushort

					Data 3:Impedance Data3 Type: ushort Data 4:Surface Voltage Data4 Type: ushort
0402	1026	BMS:AC Power Not Present	BMS[MCU]	Normal	Data 1:Temperature Data1 Type: short Data 2:Battery Voltage Data2 Type: ushort Data 3:Impedance Data3 Type: ushort Data 4:Surface Voltage Data4 Type: ushort
0403	1027	Battery Temperature Problem	BMS[MCU]	Normal	Data 1:Temperature Data1 Type: short Data 2:Battery Voltage Data2 Type: ushort Data 3:Impedance Data3 Type: ushort Data 4:Surface Voltage Data4 Type: ushort
0404	1028	Battery Temperature Normal	BMS[MCU]	Normal	Data 1:Temperature Data1 Type: short Data 2:Battery Voltage Data2 Type: ushort Data 3:Impedance Data3 Type: ushort Data 4:Surface Voltage Data4 Type: ushort
0405	1029	Battery Voltage Low	BMS[MCU]	Normal	The Battery Voltage is Low. Data 1:Temperature Data1 Type: short Data 2:Battery Voltage Data2 Type: ushort Data 3:Impedance Data3 Type: ushort Data 4:Surface Voltage Data4 Type: ushort
0406	1030	Battery Voltage Normal	BMS[MCU]	Normal	The Battery Voltage is Normal. Data 1:Temperature Data1 Type: short Data 2:Battery Voltage Data2 Type: ushort Data 3:Impedance Data3 Type: ushort Data 4:Surface Voltage Data4 Type: ushort
0407	1031	Battery Needs to Be Replaced	BMS[MCU]	Normal	The Battery is Bad. Data 1:Temperature Data1 Type: short Data 2:Battery Voltage Data2 Type: ushort Data 3:Impedance Data3 Type: ushort Data 4:Surface Voltage Data4 Type: ushort
0408	1032	Battery OK	BMS[MCU]	Normal	The Battery is not Bad. Data 1:Temperature Data1 Type: short Data 2:Battery Voltage Data2 Type: ushort Data 3:Impedance Data3 Type: ushort Data 4:Surface Voltage Data4 Type: ushort
0409	1033	Battery Charger Normal	BMS[MCU]	Normal	Battery Charger Normal. Data 1:Temperature Data1 Type: short Data 2:Battery Voltage Data2 Type: ushort Data 3:Impedance Data3 Type: ushort Data 4:Surface Voltage Data4 Type: ushort
040A	1034	Battery Charger Overvoltage	BMS[MCU]	Normal	Battery Charger Overvoltage. Data 1:Temperature Data1 Type: short Data 2:Battery Voltage Data2 Type: ushort Data 3:Impedance Data3 Type: ushort Data 4:Surface Voltage Data4 Type: ushort
040B	1035	Battery Impedance Normal	BMS[MCU]	Normal	Battery Impedance Normal. Data 1:Temperature Data1 Type: short

					Data 2:Battery Voltage Data2 Type: ushort Data 3:Impedance Data3 Type: ushort Data 4:Surface Voltage Data4 Type: ushort
040C	1036	Battery Impedance Low	BMS[MCU]	Normal	Battery Impedance Low. Data 1:Temperature Data1 Type: short Data 2:Battery Voltage Data2 Type: ushort Data 3:Impedance Data3 Type: ushort Data 4:Surface Voltage Data4 Type: ushort
040D	1037	Start Battery Test	BMS[MCU]	Normal	Data 1:Temperature Data1 Type: short Data 2:Battery Voltage Data2 Type: ushort Data 3:Impedance Data3 Type: ushort Data 4:Surface Voltage Data4 Type: ushort
040E	1038	Battery Test Finished	BMS[MCU]	Normal	Data 1:Temperature Data1 Type: short Data 2:Battery Voltage Data2 Type: ushort Data 3:Impedance Data3 Type: ushort Data 4:Surface Voltage Data4 Type: ushort
040F	1039	Hardware Fault Occured	BMS[MCU]	Normal	Data 1:Temperature Data1 Type: short Data 2:Battery Voltage Data2 Type: ushort Data 3:Impedance Data3 Type: ushort Data 4:Surface Voltage Data4 Type: ushort
0410	1040	Hardware Fault Resolved	BMS[MCU]	Normal	Data 1:Temperature Data1 Type: short Data 2:Battery Voltage Data2 Type: ushort Data 3:Impedance Data3 Type: ushort Data 4:Surface Voltage Data4 Type: ushort
0411	1041	Power Up	EVT[MCU]	Normal	Data 1:Output IO Data1 Type: ushort
0412	1042	Power Up Clear	BMS[MCU]	Normal	Data 1:Output IO Data1 Type: ushort
0413	1043	BMS:Battery Disconnect	BMS[MCU]	Normal	
0414	1044	BMS: Battery Connected	BMS[MCU]	Normal	
0415	1045	App Board Calibration Data Okay	BMS[MCU]	Normal	Application Board Calibration Data Okay. Data 1:App Calculated CRC Data1 Type: ushort Data 2:App Saved CRC Data2 Type: ushort
0416	1046	App. Board Calibration Data Invalid	BMS[MCU]	Normal	Application Board Calibration Data Invalid. Data 1:App Calculated CRC Data1 Type: ushort Data 2:App Saved CRC Data2 Type: ushort
0417	1047	CCP Board Calibration Data Okay	BMS[MCU]	Normal	CCP Board Calibration Data Okay. Data 1:CCP Calculated CRC Data1 Type: ushort Data 2:CCP Saved CRC Data2 Type: ushort
0418	1048	CCP Board Calibration Data Invalid	BMS[MCU]	Normal	CCP Board Calibration Data Invalid.

					Data 1:CCP Calculated CRC Data1 Type: ushort Data 2:CCP Saved CRC Data2 Type: ushort
0419	1049	Set Battery Disconnect	BMS[MCU]	Normal	Set Battery Disconnect.
041A	1050	Set Battery Connect	BMS[MCU]	Normal	Set Battery Connect.
041B	1051	Set Charger On	BMS[MCU]	All	Set Charger On.
041C	1052	Set Charger Off	BMS[MCU]	All	Set Charger Off.
041D	1053	Set Small Load Test On	BMS[MCU]	All	Set Small Load Test On.
041E	1054	Set Small Load Test Off	BMS[MCU]	All	Set Small Load Test Off.
041F	1055	Set Big Load Test On	BMS[MCU]	All	Set Big Load Test On.
0420	1056	Set Big Load Test Off	BMS[MCU]	All	Set Big Load Test Off.
0421	1057	Internal Temperature Sensor Faulted	BMS[MCU]	All	Internal Temperature Sensor Faulted. Data 1: Data1 Type: IntTempSensor
0422	1058	Internal Temp. Sensor Fault Cleared	BMS[MCU]	All	Internal Temperature Sensor Fault Cleared. Data 1: Data1 Type: IntTempSensor
0500	1280	User Configuration Backed Up to BMM	SUM[MCU]	Normal	User configurable settings successfully stored to the base memory.
0501	1281	BMM Setting Restore UnSuccess	SUM[MCU]	Normal	An issue was encountered restoring user settings from the base memory. The settings were not restored. Data 1:SUM Error Code Data1 Type: ushort Data 2:Called Function Return Data2 Type: ushort Data 3:Step Data3 Type: ushort
0502	1282	User Config Restored From BMM	SUM[MCU]	Normal	User configurable settings successfully restored from the base memory.
0503	1283	BMM Backup Config Unsuccessful	SUM[MCU]	Normal	An issue was encountered storing user settings to the base memory. The settings were not succesfully stored. Data 1:SUM Error Code Data1 Type: ushort Data 2:Called Function Return Data2 Type: ushort Data 3:Step Data3 Type: ushort
0504	1284	User Configuration Backed Up to CF	SUM[MCU]	Normal	User configurable settings successfully stored to a compact flash file.
0505	1285	CF Backup Settings Save Unsuccess	SUM[MCU]	Normal	An issue was encountered storing user settings to a compact flash file. The settings were not succesfully stored. Data 1:SUM Error Code Data1 Type: ushort Data 2:Called Function Return Data2 Type: ushort Data 3:Step Data3 Type: ushort
0506	1286	User Configuration Restored to CF	SUM[MCU]	Normal	User configurable settings successfully restored from the a compact flash file.
0507	1287	CF Restore Settings UnSuccess	SUM[MCU]	Normal	An issue was encountered restoring user settings from a compact flash file. The settings were not restored. Data 1:SUM Error Code Data1 Type: ushort Data 2:Called Function Return Data2 Type: ushort Data 3:Step Data3 Type: ushort
0508	1288	Validate Settings Successful	SUM[MCU]	Normal	The settings are valid.

0509	1289	Settings Validation UnSuccess	SUM[MCU]	Normal	An issue was encountered during a setting validation attempt. The settings are not valid and cannot be applied. Data 1: **Settings Group** Data1 Type: ushort Data 2: **Instance** Data2 Type: ushort Data 3: **Error** Data3 Type: ushort
050A	1290	Applied Settings Successfully	EVT[MCU]	Normal	The settings were applied and are active in the control.
050B	1291	Settings Application UnSuccess	EVT[MCU]	Normal	An issue was encountered while trying to apply settings to the control. All settings were not successfully applied. This most commonly occurs when settings are transferred from the MCU to the DSP. Data 1:Error Code Data1 Type: ushort
050C	1292	Refresh Settings Buffer Success	SUM[MCU]	Normal	The settings buffer has been refreshed with the active settings.
050D	1293	Refresh Settings Buffer Issue	SUM[MCU]	Normal	An issue was encountered while attempting to refresh the settings buffer. Values on the settings screens may not accurately reflect the active settings in the control. Data 1:Error Code Data1 Type: ushort
050E	1294	Register Settings Block Issue	SUM[MCU]	Normal	An issue was encountered during application initialization that prevented a group of settings from being successfully registered with the setup manager. Data 1:Error Code Data1 Type: ushort
050F	1295	Register Callback Issue	SUM[MCU]	Normal	An issue was encountered during application initialization that prevented settings related functions from a subsystem from being successfully registered with the setup manager. Data 1:Error Code Data1 Type: ushort
0510	1296	SUM Reg DNP Special Func. Warning	SUM[MCU]	Normal	An issue was encountered during application initialization that will prevent the functionality of one or more DNP commands. Data 1:DNP Error Code Data1 Type: ushort Data 2:Instance Data2 Type: ushort
0511	1297	Register Non-Settings Block Issue	SUM[MCU]	Normal	An issue was encountered during application initialization that prevented a group of non-settings from being successfully registered with the setup manager for access rights checking. Data 1:Error Code Data1 Type: ushort
0512	1298	User Login Access Denied	SUM[MCU]	Normal	Access to Login was denied. Data 1: **Access Denied Reason** Data1 Type: AccessDeniedReason
0513	1299	User Logout Access Denied	SUM[MCU]	Normal	Access to Logout was denied. Data 1: **Access Denied Reason** Data1 Type: AccessDeniedReason
0514	1300	BMM Not Ready	SUM[MCU]	Normal	The base memory module cannot be accessed. Data 1:BMM State Data1 Type: ushort
0515	1301	User Session Started	EVT[MCU]	Normal	A user session was started. Data 1: **User Id** Data1 Type: ushort Data 2: **Port Number** Data2 Type: PortCode
0516	1302	User Session Ended	EVT[MCU]	Normal	A user session was terminated. Data 1: **User Id** Data1 Type: ushort Data 2: **Session Ended Reason** Data2 Type:

					SUMSessionEndReason Data 3: **Port Number** Data3 Type: PortCode
0517	1303	User Access Denied	SUM[MCU]	Normal	Access to write a VM location was denied. Data 1: **Access Denied Reason** Data1 Type: AccessDeniedReason Data 2:Optional Data Depending on Reason Data2 Type: ushort
0518	1304	Register Commad to Block Issue	SUM[MCU]	Normal	An issue was encountered during application initialization that prevented a command from being successfully registered with the setup manager to block based on source (IntelliLink WiFi or IntelliLink Remote). Data 1:Error Code Data1 Type: ushort
0519	1305	Request Backup Received	SUM[MCU]	Normal	The Setup Manager received a request from another subsystem to do a backup of settings.
051A	1306	Settings Backup Success	SUM[MCU]	Normal	User configurable settings successfully stored to the base memory.
051B	1307	Settings Restore Unsuccessful	SUM[MCU]	Normal	An issue was encountered restoring user settings from the base memory. The settings were not restored. Data 1:SUM Error Code Data1 Type: ushort Data 2:Called Function Return Data2 Type: ushort Data 3:Step Data3 Type: ushort
051C	1308	Settings Restore Success Alarm	SUM[MCU]	Normal	User configurable settings successfully restored from the base memory.
051D	1309	Settings Backup Unsuccessful	SUM[MCU]	Normal	An issue was encountered storing user settings to the base memory. The settings were not succesfully stored. Data 1:SUM Error Code Data1 Type: ushort Data 2:Called Function Return Data2 Type: ushort Data 3:Step Data3 Type: ushort
051E	1310	Settings Missmatch Warning Off	SUM[MCU]	Normal	User configurable settings have been applied.
051F	1311	Settings Missmatch Warning On	SUM[MCU]	Normal	User configurable settings in the base memory are not of a compatible version with the firmware in the control so cannot be restored. Data 1:SUM Error Code Data1 Type: ushort Data 2:Called Function Return Data2 Type: ushort Data 3:Step Data3 Type: ushort
0520	1312	Apply Settings Started	SUM[MCU]	Normal	Apply of user configurable settings has started.
0521	1313	Password Setting Changed	SUM[MCU]	Normal	A user group password settings change was applied. Data 1: **GroupId** Data1 Type: ushort
0522	1314	IntelliLink Intrusion On	SUM[MCU]	Normal	User attempted three unsuccessful logons.
0523	1315	IntelliLink Intrusion Off	SUM[MCU]	Normal	Alarm re user attempting three unsuccessful logons was cleared
0524	1316	IntelliLink Intrusion Attempt	SUM[MCU]	Normal	User attempted unsuccessful logon
0600	1536	Unsuccessful Settings to Prot Proc	DPX[MCU]	Normal	An issue was encountered in moving settings across the Dual Ported RAM to the DSP that prevented some or all settings from being successfully transfered. Data 1:EOS Return Code Data1 Type: ushort Data 2:Write Group Data2 Type: ushort

					Data 3:Optional - Instance Data3 Type: ushort Data 4:Optional - Instance Group/Instance 2 Data4 Type: ushort
0601	1537	Settings Validated Successfully	DPX[MCU]	Normal	Settings Are Valid.
0602	1538	Settings Validation Unsuccessful	DPX[MCU]	Normal	An issue was encountered in validating settings. The settings are not valid and cannot be applied. Data 1: **Settings Group** Data1 Type: ushort Data 2: **Instance** Data2 Type: ushort Data 3: **Error** Data3 Type: ushort
0603	1539	DPX Reg DNP Special Func. Warning	DPX[MCU]	Normal	An issue was encountered during application initialization that will prevent the functionality of one or more DNP commands. Data 1:DNP Error Code Data1 Type: ushort Data 2:Instance Data2 Type: ushort
0604	1540	Replacement Profile UnSuccess	DPX[MCU]	Normal	An issue was encountered in replacing a profile from the DSP scratchpad that prevented some or all settings from being successfully applied. Data 1:Error Code or ATX State Data1 Type: ushort Data 2:Error Type Data2 Type: ushort Data 3:Instance Data3 Type: ushort Data 4:Instance2 Data4 Type: ushort
0605	1541	Replace Active Profile Cmd Received	DPX[MCU]	Normal	A command to replace the active profile was received. Data 1:New Active Profile Data1 Type: ushort Data 2:Previous Active Profile Data2 Type: ushort
0606	1542	Replace Active Prof Cmd Success	DPX[MCU]	Normal	The command to replace the active profile successful. Data 1:Retry Count Data1 Type: ushort
0607	1543	Replace Active Prof Cmd Unsuccess	DPX[MCU]	Normal	The command to replace the active profile was unsuccessful. Data 1:Retry Count Data1 Type: ushort
0608	1544	Lookup Table Generation Unsuccess	DPX[MCU]	Normal	The command to replace the active profile was unsuccessful. Data 1: **Profile Generation Code** Data1 Type: LookupTblGenCode Data 2: **Curve** Data2 Type: ushort Data 3: **Profile** Data3 Type: MCUProfile
0609	1545	ROCOF Tuning Parameters	DPX[MCU]	Normal	ROCOF Tuning Parameters Data 1: **Upper Kp Gain** Data1 Type: ushort Data 2: **Lower Kp Gain** Data2 Type: ushort Data 3: **Upper Ki Gain** Data3 Type: ushort Data 4: **Lower Ki Gain** Data4 Type: ushort
0700	1792	Incorrect DPR Event Information	DPR[MCU]	Normal	
0701	1793	Prot Prcsr No Response to Externals	DPR[MCU]	Normal	The DSP is not responding.
0702	1794	DPR Command Queue is Full	DPR[MCU]	Normal	
0703	1795	Invalid Argument For Externals	DPR[MCU]	Normal	Data 1: Data1 Type: Argument_1 Data 2: Data2 Type: Argument_2

0704	1796	Profile Number is Invalid	DPR[MCU]	Normal	
0705	1797	Invalid Command Handler	DPR[MCU]	Normal	
0706	1798	Prot Prcsr Responding to Externals	DPR[MCU]	Normal	The DSP is responding.
0707	1799	Clear DPR Commands and Restart	DPR[MCU]	Normal	Data 1: Data1 Type: CommandsFlush
0708	1800	WFC Transfer to CF Success	EVT[MCU]	Normal	Data 1: Data1 Type: CycleNumber Data 2: Data2 Type: SecondaryEvent Data 3: Data3 Type: NumberFrames
0709	1801	WFC Save to CF Unsuccessful	DPR[MCU]	All	Data 1: Data1 Type: ErrorCode Data 2: Data2 Type: EOSErrorCode
070A	1802	Ext WFC Transfer to CF Started	DPR[MCU]	Normal	Data 1: Data1 Type: CycleNumber
070B	1803	Ext WFC Transfer to CF Success	DPR[MCU]	Normal	Data 1: Data1 Type: CycleNumber Data 3: Data3 Type: NumberFrames
070C	1804	Ext WFC Save to CF UnSuccessl	DPR[MCU]	All	Data 1: Data1 Type: CycleNumber Data 3: Data3 Type: NumberFrames
070D	1805	Special WFC Xfer to CF Success	DPR[MCU]	Normal	Data 1: Data1 Type: CycleNumber Data 3: Data3 Type: NumberFrames
070E	1806	Special WFC Save to CF Unsuccess	DPR[MCU]	All	Data 1: Data1 Type: CycleNumber Data 3: Data3 Type: NumberFrames
070F	1807	PNG Transfer to CF Success	DPR[MCU]	Normal	Data 1: Data1 Type: CurrentCycle Data 3: Data3 Type: NumberFrames
0710	1808	PNG Data Save to CF UnSuccessl	DPR[MCU]	All	Data 1: Data1 Type: CurrentCycle Data 3: Data3 Type: NumberFrames
0711	1809	Compact Flash Memory is Not Mounted	DPR[MCU]	Normal	
0712	1810	Ext WFC Transfer to CF Finished	DPR[MCU]	Normal	Data 1: Data1 Type: CurrentCycle Data 3: Data3 Type: NumberFrames
0713	1811	PNG Transfer to CF Started	DPR[MCU]	Normal	Data 1: Data1 Type: CurrentCycle

0714	1812	PNG Transfer to CF Finished	DPR[MCU]	Normal	Data 1: Data1 Type: CurrentCycle Data 3: Data3 Type: NumberFrames
0715	1813	CF Issue (Use Next Operation)	DPR[MCU]	All	Data 1: Data1 Type: ErrorCode Data 2: Data2 Type: EOSErrorCode
0716	1814	Prot Proc Synch Error	DPR[MCU]	Normal	
0717	1815	Transfer Op Records to CF succeeded	DPR[MCU]	Normal	Data 1: Data1 Type: CycleNumber Data 2: Data2 Type: DetailSummary Data 3: Data3 Type: NumberFrames Data 4: Data4 Type: OperationRecord
0718	1816	Xfer Operation Records to CF error	DPR[MCU]	Normal	Data 1: Data1 Type: CycleNumber Data 2: Data2 Type: DetailSummary Data 3: Data3 Type: NumberFrames
0719	1817	Coordinating Signal Sent	DPR[MCU]	Normal	Data 1: **Dest RTU** Data1 Type: ushort Data 2: **Count** Data2 Type: ushort
071A	1818	Coordinating Signal Received	DPR[MCU]	Normal	Data 1:Rec Buffer Data1 Type: ushort Data 2: **Shift** Data2 Type: CECUrgentShift Data 3: **Source RTU** Data3 Type: ushort Data 4: **Port** Data4 Type: ushort
071B	1819	Keep Active or Reset Signal Sent	DPR[MCU]	Normal	Data 1: **Dest RTU** Data1 Type: ushort Data 2: **Command** Data2 Type: CECCommand
071C	1820	Keep Active or Reset Signal Rcvd	DPR[MCU]	Normal	Data 1: **Command** Data1 Type: CECCommand Data 2: **Shift** Data2 Type: CECShift Data 3: **Source RTU** Data3 Type: ushort Data 4: **Port** Data4 Type: ushort
071D	1821	CEC Not Ready to Send	DPR[MCU]	Normal	
071E	1822	No CEC Enabled Device Upstream	DPR[MCU]	Normal	
071F	1823	CEC Ready On	DPR[MCU]	Normal	
0720	1824	CEC Ready Off	DPR[MCU]	Normal	Data 4: **Step** Data4 Type: ushort
0721	1825	CEC DNP Register Peer Issue	DPR[MCU]	Normal	Data 1: **RTU** Data1 Type: ushort Data 2: **DNP Return Code** Data2 Type: ushort Data 4: **Step** Data4 Type: ushort
0800	2048	DNP Initialization Complete	DNP[MCU]	Normal	Displayed when initialization of DNP processes has completed without error.

					Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0801	2049	Route Table Initialization Error	DNP[MCU]	Normal	The routing table was unable to be initialized, preventing initialization of DNP processes from being completed. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0802	2050	Point Map Initialization Error	DNP[MCU]	Normal	The point mapping table was unable to be initialized, preventing initialization of DNP processes from being completed. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0803	2051	Error in Configuration Data	DNP[MCU]	Normal	A configuration setup parameter was found to be set incorrectly or out of range. Data 1: **Setup Value** Data1 Type: ushort Data 2: **Min Value** Data2 Type: ushort Data 3: **Max Value** Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0804	2052	Old Configuration Remains in Effect	DNP[MCU]	Normal	Indicates that due to an error in configuration data the existing setup will continue to be used by the application. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0805	2053	Configuration Change Accepted	DNP[MCU]	Normal	Changes to the communications setup parameters were validated and have been made active within the application. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0806	2054	Master Record Not Added	DNP[MCU]	Normal	The master record was unable to be added to the peer device list due to either an incorrect parameter or the peer device list is full. Data 1: **Master Record Add Error** Data1 Type: MasterRecAddError Data 2: Code Location Data2 Type: ushort Data 3:Master Number Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0807	2055	Map Change Callback Init Error	DNP[MCU]	Normal	A DNP point map change callback function was unable to be registered due to a full callback list. This prevented initialization of DNP processes from being completed. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0808	2056	Incorrect Frame Length	DNP[MCU]	Extended	The actual length of the received DNP frame does not match the length indicated in the DNP data link header. The frame is discarded.

					Data 1: **Actual Length** Data1 Type: ushort Data 2: **Indicated Length** Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4: Code Location Data4 Type: ushort
0809	2057	Serial Port Reset Error	DNP[MCU]	Normal	An error occurred in reset of a serial port during a communications setpoint configuration change. Changes to serial port configuration may not have taken affect. Data 1: **Port Number** Data1 Type: PortCode Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
080A	2058	P2P Receive buffer full	DNP[MCU]	Normal	
080B	2059	P2P Frag received from transport	DNP[MCU]	All	Data 1: **Peer Address** Data1 Type: ushort Data 2: **Fragment Length** Data2 Type: ushort Data 3: **Port ID** Data3 Type: ushort Data 4: **Fragment ID** Data4 Type: ushort
080C	2060	Error Registering Special Function	DNP[MCU]	Normal	
080D	2061	P2P Notification received	DNP[MCU]	All	Data 1: **Source Address / ID** Data1 Type: ushort Data 2: **Destination Address /Code** Data2 Type: ushort Data 3: **Sequence Number / Layer** Data3 Type: ushort Data 4: **Connection ID/0** Data4 Type: ushort
080E	2062	TCP Port Maintenance	DNP[MCU]	Extended	The actual length of the received DNP frame does not match the length indicated in the DNP data link header. The frame is discarded. Data 1: **TCP Port Connect State** Data1 Type: TCPPortConnectState Data 2: **TCP Port Active State** Data2 Type: TCPPortActiveState Data 3: **Destination RTU Address** Data3 Type: RTUAddress Data 4: **Diagnostic Value** Data4 Type: ushort
0820	2080	Invalid Transport Segment Length	DNP[MCU]	Extended	The transport segment length of the DNP frame is invalid. The frame was discarded. The valid range is from 3 to 250. Data 1: **Segment Length** Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0821	2081	Receive Message Buffer Full	DNP[MCU]	Extended	The transport function receive message buffers are full. These buffers hold the frame header information and other message details. The new frame is discarded. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0822	2082	Receive Data Buffer Full	DNP[MCU]	Extended	The transport function receive data buffers are full. These buffers hold the data portion of the received DNP frames. The new frame is discarded. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort

					Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0823	2083	Removed Old FIR-Only Message	DNP[MCU]	All	An incomplete fragment was discarded due to a newer message being received from the same source device. Data 1: **Transport Header** Data1 Type: DNPTransportHeader Data 2:Debug Data Data2 Type: ushort Data 3: **Source Address** Data3 Type: RTUAddress Data 4:Debug Data Data4 Type: ushort
0824	2084	App Layer Accepted FIR/FIN Message	DNP[MCU]	All	A single-frame fragment was successfully processed by the application layer and is being removed from the transport function buffers. Data 1: **Transport Header** Data1 Type: DNPTransportHeader Data 2: **Fragment Length** Data2 Type: ushort Data 3: **Source Address** Data3 Type: RTUAddress Data 4:Debug Data Data4 Type: ushort
0825	2085	App Layer Accepted FIN Only Message	DNP[MCU]	All	A multi-frame fragment was successfully processed by the application layer and is being removed from the transport function buffers. Data 1: **Transport Header** Data1 Type: DNPTransportHeader Data 2: **Fragment Length** Data2 Type: ushort Data 3: **Source Address** Data3 Type: RTUAddress Data 4:Debug Data Data4 Type: ushort
0826	2086	Frame Addition Unsuccessful	DNP[MCU]	Extended	A newly received frame of a multi-frame fragment was unable to be added to the fragment due to the 2k fragment size restriction. The fragment was discarded. Data 1: **Transport Header of Fragment** Data1 Type: DNPTransportHeader Data 2: **Transport Header of Frame** Data2 Type: DNPTransportHeader Data 3: **Source Address** Data3 Type: RTUAddress Data 4:Debug Data Data4 Type: ushort
0827	2087	Fragment Not Found	DNP[MCU]	Extended	A matching fragment was not found in the buffers for a newly received frame of a multi-frame fragment. The frame was discarded. Data 1: **Transport Header** Data1 Type: DNPTransportHeader Data 2:Debug Data Data2 Type: ushort Data 3: **Source Address** Data3 Type: RTUAddress Data 4:Debug Data Data4 Type: ushort
0828	2088	Transp. Layer Xmit Frag Too Long	DNP[MCU]	Extended	The application layer was requested to send a fragment larger than the 2k size limitation. Data 1: **Fragment Length** Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0829	2089	Transp. Layer TX Fragment Buf Full	DNP[MCU]	Extended	No free buffer was found in the transport function transmit buffers. The application layer may save this message and reattempt to transmit. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort

082A	2090	Frame Accepted by Data Link Layer	DNP[MCU]	All	A single frame was successfully handed off to the data link layer for transmit. Note that this may be a single frame of a multi-frame fragment. Data 1: **Source Address** Data1 Type: RTUAddress Data 2: **Destination Address** Data2 Type: RTUAddress Data 3: **Transport Header** Data3 Type: DNPTransportHeader Data 4: **Frame Length** Data4 Type: ushort
082B	2091	Message Timed Out on Receive List	DNP[MCU]	Extended	A fragment was removed from the transport function receive buffer after an extended period of inactivity. Data 1: **Transport Header** Data1 Type: DNPTransportHeader Data 2:Debug Data Data2 Type: ushort Data 3: **Source Address** Data3 Type: RTUAddress Data 4:Debug Data Data4 Type: ushort
082C	2092	Message Timed Out on Transmit List	DNP[MCU]	Extended	A fragment was removed from the transport function transmit buffer after an extended period of inactivity. Data 1: **Transport Header** Data1 Type: DNPTransportHeader Data 2:Debug Data Data2 Type: ushort Data 3: **Source Address** Data3 Type: RTUAddress Data 4:Debug Data Data4 Type: ushort
082D	2093	Removed Deferred Read Request	DNP[MCU]	Extended	A DNP read request that was deferred due to an outstanding unsolicited message was removed due to reception of a newer request. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
082E	2094	Frame Declined by Datalink	DNP[MCU]	Extended	The datalink layer was unable to accept the request to transmit this frame. The frame transmit will be retried until it is accepted or the message times out on the transmit list. Data 1: Error code returned by OS Data1 Type: ushort Data 2: **Destination Address** Data2 Type: RTUAddress Data 3: **Transport Header** Data3 Type: DNPTransportHeader Data 4: **Frame Length** Data4 Type: ushort
082F	2095	Port Undefined in Transport	DNP[MCU]	All	Data 1: **Destination Addrss** Data1 Type: ushort
0840	2112	Reset Peer Link Sent	DNP[MCU]	Extended	A Reset data link frame was sent to a peer device in an attempt to reinitialize peer-to-peer communications. Data 1: **Source Address** Data1 Type: RTUAddress Data 2: **Destination Address** Data2 Type: RTUAddress Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0841	2113	Reset Peer Link Received	DNP[MCU]	Extended	A Reset data link frame was received from the reported peer device. Data 1: **Source Address** Data1 Type: RTUAddress Data 2: **Action Taken 1=record reinit 2=reset seq num only 3=new peer added** Data2 Type: DNPDLAction Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0842	2114	Msg Taken Off Xmit List - No Peer	DNP[MCU]	Extended	The destination peer device was not found in the peer list, possibly due to a change in configuration. The message was discarded.

					Data 1: **Source Address** Data1 Type: RTUAddress Data 2: **Destination Address** Data2 Type: RTUAddress Data 3: **Application Control** Data3 Type: DNPAppControl Data 4: **Function Code** Data4 Type: DNPAppFunctionCode
0843	2115	Set URBE Timer Error	DNP[MCU]	Extended	An error was detected when attempting to start an internal timer. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0844	2116	No URBE Delay Timer	DNP[MCU]	Extended	No free timer was found when attempting to start an internal timer. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0845	2117	Duplicate Fragment Received	DNP[MCU]	Extended	The application layer detected reception of a duplicate fragment. The previous response will be resent. Data 1: **Source Address** Data1 Type: RTUAddress Data 2: **Destination Address** Data2 Type: RTUAddress Data 3: **Application Control** Data3 Type: DNPAppControl Data 4:Debug Data Data4 Type: ushort
0846	2118	App. LayerTransmit Frag Too Long	DNP[MCU]	Extended	The application layer was requested to send a fragment larger than the 2k size limitation. Data 1: **Fragment Length** Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0847	2119	App. Layer TX Fragment Buffer Full	DNP[MCU]	Extended	No free buffer was found in the application layer transmit list. The fragment may be retried or discarded. Data 1: Code Location Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0848	2120	Invalid Fragment Length Received	DNP[MCU]	Extended	The application layer detected a fragment with an invalid length. The valid rand is from 2 to 2048 bytes. The fragment was discarded. Data 1: **Fragment Length** Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0849	2121	Incorrect Amount of Data Received	DNP[MCU]	Extended	The application layer detected an inconsistency in the amount of data in the fragment. The fragment was discarded. Data 1: **Source Address** Data1 Type: RTUAddress Data 2: **Reported Length** Data2 Type: ushort Data 3: **Actual Length** Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
084A	2122	Fragment Timed Out on Transmit List	DNP[MCU]	Extended	The fragment was removed from the application layer transmit list after an extended period of inactivity. This will normally only occur if the transport function and data link layer are unable to service transmit requests. Data 1: **Source Address** Data1 Type: RTUAddress Data 2: **Destination Address** Data2 Type: RTUAddress

					Data 3: **Application Control** Data3 Type: DNPAppControl Data 4: **Function Code** Data4 Type: DNPAppFunctionCode
084B	2123	App Layer Accepted Good Fragment	DNP[MCU]	All	The application layer successfully accepted a complete fragment from the transport function. Data 1: **Source Address** Data1 Type: RTUAddress Data 2: **Data Length** Data2 Type: ushort Data 3: **Application Control** Data3 Type: DNPAppControl Data 4: **Function Code** Data4 Type: DNPTranspFunctionCode
084C	2124	Peer Device Buffer Full	DNP[MCU]	Extended	A peer device was unable to be added to the peer device list due to the buffer being full. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
084D	2125	Peer Device Already on List	DNP[MCU]	Extended	Addition of the peer device to the list was unsuccessful because the device is already on the list. Data 1: **Peer RTU Address** Data1 Type: RTUAddress Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
084E	2126	Peer Device Removed From List	DNP[MCU]	Extended	The peer device was successfully removed from the peer device list. Data 1: **Peer RTU Address** Data1 Type: RTUAddress Data 2: **Connection ID** Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
084F	2127	Peer Device Added to List	DNP[MCU]	Extended	The peer device was successfully added to the peer device list. Data 1: **Peer RTU Address** Data1 Type: RTUAddress Data 2: **Connection ID** Data2 Type: ConnectionID Data 3: **Port Code** Data3 Type: PortCode Data 4:Master Number Data4 Type: Master
0850	2128	FIR/FIN Not Set	DNP[MCU]	Extended	The application layer found that the FIR and FIN bits of the Application Control byte were not set. The fragment was discarded. Data 1: **Source Address** Data1 Type: RTUAddress Data 2: **Destination Address** Data2 Type: RTUAddress Data 3: **Application Control** Data3 Type: DNPAppControl Data 4:Debug Data Data4 Type: ushort
0851	2129	Sequence Number Mismatch	DNP[MCU]	Extended	The application layer found that the sequence number in the Application Control byte was inconsistent with what was expected. The fragment was discarded. Data 1: **Source Address** Data1 Type: RTUAddress Data 2: **Destination Address** Data2 Type: RTUAddress Data 3: **Application Control** Data3 Type: DNPAppControl Data 4:Debug Data Data4 Type: ushort
0852	2130	Transient Peer Dev Addition Issue	DNP[MCU]	Extended	The source of this fragment was unknown so an attempt was made to add it to the peer device list. The attempt was unsuccessful so the fragment was discarded. Data 1: **Source Address** Data1 Type: RTUAddress Data 2: **Application Control** Data2 Type: DNPAppControl Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort

0853	2131	No Peer Record Found During Xmit	DNP[MCU]	Extended	A transmit was attempted to a device that was not found on the peer device list. The transmit was aborted. Data 1: Code Location Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0854	2132	URBE Registration Buffer Full	DNP[MCU]	Extended	The buffer containing callback functions for unsolicited messages was full when attempting to add another function. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0855	2133	Peer Device Not on List	DNP[MCU]	Extended	The requested peer device was not found on the peer device list when attempting to remove the device from the list. Data 1: **Peer RTU Address** Data1 Type: RTUAddress Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0856	2134	Initial Unsolicited Msg Confirmed	DNP[MCU]	Extended	Indicates that a confirmation message was received for the unsolicited null messages that must be sent on power up. Data 1: **Callback Status** Data1 Type: CallbackStatus Data 2:Debug Data Data2 Type: RTUAddress Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0857	2135	URBE Enabled Via SCADA	DNP[MCU]	Extended	Unsolicited Report by Exception processing was enabled over SCADA. Data 1: **Source Address** Data1 Type: RTUAddress Data 2: **URBE Status** Data2 Type: URBEStatus Data 3:Active URBE Class Mask Data3 Type: ActiveURBEClassMask Data 4:Debug Data Data4 Type: ushort
0858	2136	URBE Disabled Via SCADA	DNP[MCU]	Extended	Unsolicited Report by Exception processing was disabled over SCADA. Data 1: **Source Address** Data1 Type: RTUAddress Data 2: **URBE Status** Data2 Type: URBEStatus Data 3:Active URBE Class Mask Data3 Type: ActiveURBEClassMask Data 4:Debug Data Data4 Type: ushort
0859	2137	Port Code Invalid	DNP[MCU]	Extended	An invalid port code was detected when attempting to add a peer device to the peer device list. Data 1: **Peer RTU Address** Data1 Type: RTUAddress Data 2: **Invalid Port Code value** Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
085A	2138	Cold Restart Requested	EVT[MCU]	Normal	A cold restart of the control has been requested over SCADA, and will be performed in two seconds. Data 1: **Source Address** Data1 Type: RTUAddress Data 2: **Destination Address** Data2 Type: RTUAddress Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort

085B	2139	Function Code Not Implemented	DNP[MCU]	Extended	The application layer received a message containing a DNP function code that is invalid or is not implemented. Data 1: **Source Address** Data1 Type: RTUAddress Data 2: **Destination Address** Data2 Type: RTUAddress Data 3: **Function Code** Data3 Type: DNPAppFunctionCode Data 4:Debug Data Data4 Type: ushort
085C	2140	Unknown Master Access Restricted	DNP[MCU]	Extended	A device that was previously unknown has requested an action that is restricted to configured master stations. The restricted actions are writes, select/operate and cold restart. Data 1: **Source Address** Data1 Type: RTUAddress Data 2: **Destination Address** Data2 Type: RTUAddress Data 3: **Function Code** Data3 Type: DNPAppFunctionCode Data 4:Debug Data Data4 Type: ushort
085D	2141	Peer Device Modified on List	DNP[MCU]	Extended	The peer device was successfully modified on the peer device list. Data 1: **Peer RTU Address** Data1 Type: RTUAddress Data 2: Code Location Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Master Number Data4 Type: ushort
085E	2142	Request time synch received	DNP[MCU]	All	A response was received with the need-time IIN set and a time sync is being attempted. Data 1: **Status** Data1 Type: EvtBoolean Data 2: **Source Address** Data2 Type: RTUAddress Data 3: **Destination Address** Data3 Type: RTUAddress Data 4:Debug Data Data4 Type: ushort
085F	2143	P2P Bad transmit fragment length	DNP[MCU]	All	Data 1: **Length of Fragment** Data1 Type: ushort Data 2:Debug text Data2 Type: ushort Data 3:Debug text Data3 Type: ushort Data 4:Debug text Data4 Type: ushort
0860	2144	P2P Transmit fragment buffer full	DNP[MCU]	Normal	
0861	2145	P2P No peer device record	DNP[MCU]	All	Data 1: **Destination Address** Data1 Type: ushort
0862	2146	P2P Fragment declined by transport	DNP[MCU]	Extended	Data 1: **Result Code** Data1 Type: ushort Data 2: **Destination Address/Code** Data2 Type: ushort Data 3: **Fragment Length** Data3 Type: ushort Data 4: **Code Location** Data4 Type: ushort
0863	2147	P2P No peer for received fragment	DNP[MCU]	All	Data 1: **Peer Address** Data1 Type: ushort
0864	2148	P2P Application layer CRC error	DNP[MCU]	All	Data 1: **Source Address** Data1 Type: ushort Data 2: **Local Address** Data2 Type: ushort Data 3: **Expected Sequence Number** Data3 Type: ushort
0865	2149	P2P App layer sequence error	DNP[MCU]	Extended	Data 1: **Source Address** Data1 Type: ushort Data 2: **Connection ID** Data2 Type: ushort

					Data 3: **Expected sequence number** Data3 Type: ushort Data 4: **Received sequence number** Data4 Type: ushort
0866	2150	P2P Unknown peer access restricted	DNP[MCU]	Extended	Data 1: **Local Peer Addr** Data1 Type: ushort Data 2: **Source Peer Addr** Data2 Type: ushort Data 3: **Requested Function** Data3 Type: ushort Data 4: **Connection ID** Data4 Type: ushort
0867	2151	P2P Error block received from peer	DNP[MCU]	Normal	Data 1: **Source Addr** Data1 Type: ushort Data 2: **Connection ID** Data2 Type: ushort Data 3: **Errant Object** Data3 Type: ushort Data 4: **Errant Code** Data4 Type: ushort
0868	2152	P2P Function code not implemented	DNP[MCU]	All	Data 1: **Local Peer Addr** Data1 Type: ushort Data 2: **Source Peer Addr** Data2 Type: ushort Data 3: **Requested Function** Data3 Type: ushort Data 4: **Connection ID** Data4 Type: ushort
0869	2153	P2P Peer not P2P compatible	DNP[MCU]	All	Data 1: **Destination Address** Data1 Type: ushort Data 2: **Connection ID** Data2 Type: ushort
086A	2154	P2P Protocol not recognized	DNP[MCU]	All	Data 1: **Protocol Type** Data1 Type: ushort
086B	2155	P2P Error found in response data	DNP[MCU]	Extended	Data 1: **Source Address** Data1 Type: ushort Data 2: **Connection ID** Data2 Type: ushort Data 3: **Errant Object** Data3 Type: ushort Data 4: **Errant Code** Data4 Type: ushort
086C	2156	Association reset link sent	DNP[MCU]	All	Data 1: **Source Addr** Data1 Type: ushort Data 2: **Destination Addr** Data2 Type: ushort Data 3: **Port ID** Data3 Type: ushort
086D	2157	Association reset link send error	DNP[MCU]	Extended	Data 1: **Source Addr** Data1 Type: ushort Data 2: **Destination Addr** Data2 Type: ushort Data 3: **Port ID** Data3 Type: ushort
086E	2158	Association reset link ack rcvd	DNP[MCU]	All	Data 1: **Peer Addr** Data1 Type: ushort Data 2: **Connection ID** Data2 Type: ushort
086F	2159	P2P Association test sent	DNP[MCU]	All	Data 1: **Destination Addr** Data1 Type: ushort
0870	2160	P2P Assoc test Unsuccessful	DNP[MCU]	Extended	Data 1: **Destination Addr** Data1 Type: ushort
0871	2161	P2P Association test response rcvd	DNP[MCU]	All	Data 1: **Peer Device Address** Data1 Type: ushort Data 2: **P2P Support Flag** Data2 Type: ushort Data 3: **MTU Size** Data3 Type: ushort

0872	2162	P2P Support query received	DNP[MCU]	All	Data 1: **Source Address** Data1 Type: ushort
0873	2163	P2P Reset Association frame sent	DNP[MCU]	All	Data 1: **Peer Device Address** Data1 Type: ushort
0874	2164	Association negotiation incomplete	DNP[MCU]	Extended	Data 1: **Destination Address** Data1 Type: ushort Data 2: **Association State** Data2 Type: ushort
0875	2165	P2P Xmt temporarily suspended	DNP[MCU]	All	Data 1: **Destination Addr** Data1 Type: ushort Data 2: **Connection ID** Data2 Type: ushort Data 3: **Suspend Countdown Timer Value** Data3 Type: ushort
0876	2166	P2P App layer fragment xmit	DNP[MCU]	All	Data 1: **Transmit Result Code** Data1 Type: ushort Data 2: **Destination Addr** Data2 Type: ushort Data 3: **Port ID** Data3 Type: ushort Data 4: **Fragment Length** Data4 Type: ushort
0877	2167	Local/Remote Callback Registered	DNP[MCU]	Normal	
0880	2176	Special Function Buffer Full	DNP[MCU]	Extended	An attempt by the application to register a special memory read/write function was rejected because the buffer was full. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0881	2177	Special Function Already on List	DNP[MCU]	Extended	An attempt by the application to register a special memory read/write function was rejected because a special function for that memory location already exists in the buffer. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0882	2178	Error in Object Parse	DNP[MCU]	Extended	The header or data portion of an object that was returned in a response message was invalid or otherwise unexpected. If possible other objects within the response will still be processed. Data 1: **Object Type** Data1 Type: DNPObjectType Data 2: **Source Address** Data2 Type: RTUAddress Data 3: **Destination Address** Data3 Type: RTUAddress Data 4: Data4 Type: ushort
0883	2179	Object Variation Error	DNP[MCU]	Extended	The variation of the object that was returned in the response message is invalid or unsupported. Data 1: **Object Type** Data1 Type: DNPObjectType Data 2: **Source Address** Data2 Type: RTUAddress Data 3: **Destination Address** Data3 Type: RTUAddress Data 4: **Variation** Data4 Type: DNPObjectVariation
0884	2180	Object Qualifier Error	DNP[MCU]	Extended	The qualifier code of the object that was returned in the response message is invalid or unsupported. Data 1: **Object Type** Data1 Type: DNPObjectType Data 2: **Source Address** Data2 Type: RTUAddress

					Data 3: **Destination Address** Data3 Type: RTUAddress Data 4: **Invalid Qualifier/ Index code** Data4 Type: ushort
0885	2181	Parsed Data Buffer Full	DNP[MCU]	Extended	The data buffer containing the parsed object data is full. No further parsing of this response message will take place. Data 1: **Object Type** Data1 Type: DNPObjectType Data 2: **Source Address** Data2 Type: RTUAddress Data 3: **Destination Address** Data3 Type: RTUAddress Data 4: **Variation** Data4 Type: DNPObjectVariation
0886	2182	Object Header Error	DNP[MCU]	Extended	An error was detected in the object header of the DNP message. Data 1: **Source Address** Data1 Type: RTUAddress Data 2: **Destination Address** Data2 Type: RTUAddress Data 3: **Object Type** Data3 Type: DNPObjectType Data 4: **Variation** Data4 Type: DNPObjectVariation
0887	2183	Error Assembling Object Header	DNP[MCU]	Extended	An error was detected in the object header during assembly of a response message. The response process was aborted. Data 1: **Source Address** Data1 Type: RTUAddress Data 2: **Destination Address** Data2 Type: RTUAddress Data 3: **Object Type** Data3 Type: DNPObjectType Data 4: **Variation** Data4 Type: DNPObjectVariation
0888	2184	Invalid Object Range Index	DNP[MCU]	Extended	An error was detected in an object header of the current request message related to the data index values. An attempt will be made to process other objects within the message. Data 1: **Source Address** Data1 Type: RTUAddress Data 2: **First Index or Index Size** Data2 Type: ushort Data 3: **Last Index or Qualifier** Data3 Type: ushort Data 4: Code Location Data4 Type: ushort
0889	2185	Fragment Data Size Error	DNP[MCU]	Extended	The amount of data available in the fragment was not consistent with the expected amount of data. The fragment was discarded. Data 1: **Source Address** Data1 Type: RTUAddress Data 2: **Data Length** Data2 Type: ushort Data 3: **Data Index** Data3 Type: ushort Data 4: Code Location Data4 Type: ushort
088A	2186	Object/Variation Not Supported	DNP[MCU]	Extended	The object being processed does not include a support object and variation combination. An attempt will be made to continue parsing other objects within the message. Data 1: **Source Address** Data1 Type: RTUAddress Data 2: **Object Type** Data2 Type: DNPObjectType Data 3: **Variation** Data3 Type: DNPObjectVariation Data 4: Code Location Data4 Type: ushort
088B	2187	Special Function Registered	DNP[MCU]	Extended	A special function related to a specific memory action and virtual memory address was successfully added to the list. Data 1: **VMFunctionCode** Data1 Type: VMFunctionCode Data 2: **Memory Address** Data2 Type: VAddr16 Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
088C	2188	Virtual Memory Read or Write Error	DNP[MCU]	Extended	A request to read or write virtual memory addresses was unsuccessful. Data 1: **Source Address** Data1 Type: RTUAddress Data 2: **Memory Address** Data2 Type: VAddr16 Data 3: Result Code returned by OS Data3 Type: ushort Data 4: **Action** Data4 Type: VMAccessAction

088D	2189	SBO Select Timer Unavailable	DNP[MCU]	Extended	An internal timer was not available to perform the select-before-operate timing function. The operation request was aborted. Data 1: **Object Type** Data1 Type: DNPObjectType Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
088E	2190	SBO Select Timer Error	DNP[MCU]	Extended	An error was detected when attempting to initialize a select-before-operate timer. The operation request was aborted. Data 1: **Object Type** Data1 Type: DNPObjectType Data 2: **SBO Timer Value** Data2 Type: SBOTimerValue Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
088F	2191	Issue With Output Block	DNP[MCU]	All	An operation request was unsuccessful due to an issue in the Control Relay Output Block of the message. See DNP documentation for a complete list of DNP Output Block status codes. Data 1: **Object Type** Data1 Type: DNPObjectType Data 2: **DNP Output Block Status Code** Data2 Type: DNPOutputBlockStatusCode Data 3: **Point Number** Data3 Type: ushort Data 4: **Function Code** Data4 Type: DNPAppFunctionCode
08A0	2208	Control Point Function Registered	DNP[MCU]	Extended	A control point special function was successfully added to the list. This function connects a control operation with functionality elsewhere in the application. Data 1: **Point Code** Data1 Type: DNPPointCode Data 2: **Associated RTU Address** Data2 Type: RTUAddress Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08A1	2209	Control Point Code Not Mapped	DNP[MCU]	Extended	A control point special function was not added to the list because the control point is not yet included in the point mapping configuration. Data 1: **Point Code** Data1 Type: DNPPointCode Data 2: **Associated RTU Address** Data2 Type: RTUAddress Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08A2	2210	Change to Point Map Detected	DNP[MCU]	All	A configuration change to a point map was detected. This change will be processed 30 seconds after the last change is detected. Data 1: **Map Number** Data1 Type: MapNumber Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08A3	2211	Error in Getting Map Timer	DNP[MCU]	Extended	An error was detected when attempting to initialize a map-change timer. The operation will be retried. Data 1: **Map Number** Data1 Type: MapNumber Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08A4	2212	Point Processing Timer Unavailable	DNP[MCU]	Extended	An internal timer was not available to perform the routing table configuration change timing function. DNP initialization will be aborted. Data 1:Debug Data Data1 Type: ushort

					Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08A5	2213	Point Map Reinitialized	DNP[MCU]	Normal	The point map was successfully reinitialized following completion of changes to the point map configuration. Data 1: **Map Number** Data1 Type: MapNumber Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08A6	2214	Point Definition Invalid	DNP[MCU]	Extended	An issue was found in the configuration data of a mapped point. The map will not be initialized until the error is corrected. Data 1: **Map Number** Data1 Type: MapNumber Data 2: **Point Index** Data2 Type: ushort Data 3: **Error Data** Data3 Type: ushort Data 4: Code Location Data4 Type: ushort
08A7	2215	Input Point Code Not Mapped	DNP[MCU]	Extended	The application attempted to supply input data for a point that was not included in the configured point mapping. Data 1: **Point Type** Data1 Type: DNPPointType Data 2: **Point Code** Data2 Type: DNPPointCode Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08A9	2217	Event Buffer Overflow	DNP[MCU]	Extended	An overflow condition has been reached for the event buffer of the reported point type. The oldest event will be removed to make room for this new event, and the overflow IIN bit will be set. Data 1: **DNP Point Type** Data1 Type: DNPPointType Data 2:Master Number Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08AA	2218	Analog Output Function Registered	DNP[MCU]	Extended	An analog output point special function was successfully added to the list. This function connects an Analog output operation with functionality elsewhere in the application. Data 1: **Point Code** Data1 Type: DNPPointCode Data 2: **Associated RTU Address** Data2 Type: RTUAddress Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08AB	2219	Analog Output Code Not Mapped	DNP[MCU]	Extended	An analog output point special function was not added to the list because the analog output point is not yet included in the point mapping configuration. Data 1: **Point Code** Data1 Type: DNPPointCode Data 2: **Associated RTU Address** Data2 Type: RTUAddress Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08AC	2220	Map Change Callback Buffer Full	DNP[MCU]	Extended	A special function to be used to inform the application about map changes was unable to be added to the list. The list was full. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08AD	2221	Map Change Callback Registered	DNP[MCU]	Extended	A special function to be used to inform the application about map changes was successfully added to the list. Data 1:Debug Data Data1 Type: ushort

					Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08C0	2240	Route Processing Timer Unavailable	DNP[MCU]	Extended	An internal timer was not available to perform the map-change timing function. DNP initialization will be aborted. Data 1: **Map Number** Data1 Type: MapNumber Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08C1	2241	Route Entry Invalid	DNP[MCU]	Extended	An issue was found with one of the configured route entries. The route table will not be initialized until the issue is corrected. Data 1: **Route RTU Address** Data1 Type: RTUAddress Data 2: **Route Table Index** Data2 Type: ushort Data 3: **Route Entry Error** Data3 Type: RouteEntryError Data 4:Debug Data Data4 Type: ushort
08C2	2242	Route Could Not be Added	DNP[MCU]	Extended	The routing table did not have room for the new route. The route table will not be initialized. Data 1: **Route RTU Address** Data1 Type: RTUAddress Data 2: **Route Table Index** Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08C3	2243	Route Table Initialized	DNP[MCU]	Normal	The route table was successfully initialized with configured routes and routing was enabled. Data 1: **Count of Routes** Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08C4	2244	Route Configuration Change Detected	DNP[MCU]	All	A configuration change to the routing table was detected. This change will be processed 30 seconds after the last change is detected Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08C5	2245	Error in Route Change Timer	DNP[MCU]	Extended	An error was detected when attempting to initialize a route table-change timer. The operation will be retried. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08C6	2246	Pass-Through Routing Enabled	DNP[MCU]	Normal	A valid pass-through route configuration was found and pass-through routing was enabled. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08C7	2247	Pass-Through Routing Disabled	DNP[MCU]	Normal	A valid pass-through route configuration was not found and pass-through routing was disabled. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort

					Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08C8	2248	DNP Diag Test Start	DNP[MCU]	Normal	Data 1: **Test Type** Data1 Type: DiagTestType Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08C9	2249	DNP Diag KeepAlive Start	DNP[MCU]	Normal	Data 1: **Test Type** Data1 Type: DiagTestType Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08CA	2250	DNP Diag Test Ending	DNP[MCU]	Normal	Data 1: **Test Type** Data1 Type: DiagTestType Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08CB	2251	DNP Diag KeepAlive End	DNP[MCU]	Normal	Data 1: **Test Type** Data1 Type: DiagTestType Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08CC	2252	DNP Diag Ping Timeout	DNP[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08CD	2253	DNPDiag Send Error	DNP[MCU]	Normal	Data 1: **DNP Address** Data1 Type: DNPAddress Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08CE	2254	DNP Diag Max Peers	DNP[MCU]	Normal	Data 1: **Max Peers When This Occurs** Data1 Type: MaxPeersWhen Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08CF	2255	DNP Diag No Peers	DNP[MCU]	Normal	Data 1: **No Peers When This Occurs** Data1 Type: NoPeersWhen Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08D0	2256	DNPDiag Test Suspended	DNP[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort

08D1	2257	DNPDiag Test Resumed	DNP[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08D2	2258	DNPDiag WatchDog Triggered	DNP[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08D3	2259	DNP Comm Sys Alarm On	DNP[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08D4	2260	DNP Comm Sys Alarm Off	DNP[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08D5	2261	No Diagnostics On Peer. Cannot Test.	DNP[MCU]	All	Remote Peer does not have diagnostics installed, so tests cannot be performed with it. Data 1: **DNP Address** Data1 Type: DNPAddress Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08D6	2262	Switching to Failover Master	DNP[MCU]	Extended	Switching to Failover Master Data 1: **Master RTU Address** Data1 Type: RTUAddress Data 2: **IP addr first half** Data2 Type: Hexushort Data 3:IP addr second half Data3 Type: Hexushort Data 4:Master Number Data4 Type: ushort
08D7	2263	Switching to Master Primary	DNP[MCU]	Extended	Switching to Master Primary Data 1: **Master RTU Address** Data1 Type: RTUAddress Data 2: **IP addr first half** Data2 Type: Hexushort Data 3:IP addr second half Data3 Type: Hexushort Data 4:Master Number Data4 Type: ushort
08D8	2264	Master wrong IP Addr Cmd Rejected	DNP[MCU]	Extended	Switching to Master Primary Data 1: **Master RTU Address** Data1 Type: RTUAddress Data 2: **IP addr first half** Data2 Type: Hexushort Data 3:IP addr second half Data3 Type: Hexushort Data 4:Port Code Data4 Type: ushort
08D9	2265	Invalid Master Cmd Rejected	DNP[MCU]	Extended	Switching to Master Primary Data 1: **Master RTU Address** Data1 Type: RTUAddress Data 2: **IP addr first half** Data2 Type: Hexushort Data 3:IP addr second half Data3 Type: Hexushort Data 4:Function Code Data4 Type: Hexushort
08DA	2266	Master has wrong port type Cmd Rejected	DNP[MCU]	Extended	Switching to Master Primary Data 1: **Master RTU Address** Data1 Type: RTUAddress Data 2: **IP addr first half** Data2 Type: Hexushort

					Data 3:IP addr second half Data3 Type: Hexushort Data 4:Port Code Data4 Type: ushort
08DB	2267	Master used reserved addr. Cmd Rejected	DNP[MCU]	Extended	Switching to Master Primary Data 1: **Master RTU Address** Data1 Type: RTUAddress Data 2: **IP addr first half** Data2 Type: Hexushort Data 3:IP addr second half Data3 Type: Hexushort Data 4:Port Code Data4 Type: ushort
08DC	2268	SCADA Set Date/Time	DNP[MCU]	All	SCADA Set Date/Time Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08DD	2269	Recorded Time is 0	DNP[MCU]	All	Recorded Time is 0 Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
08DE	2270	Cold Restart Command Disabled	DNP[MCU]	All	Cold Restart Command Disabled Data 1:Debug Data Data1 Type: RTUAddress Data 2:Debug Data Data2 Type: RTUAddress Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0900	2304	Internal Data Inconsistency	BMM[MCU]	Extended	Base Memory Module-related data sctructures are out of synch. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort
0901	2305	Invalid Call	BMM[MCU]	Extended	BMM software was called incorrectly. Data 1: **BMM Operation** Data1 Type: BMMOp Data 2: **Record ID** Data2 Type: BMMRecId
0902	2306	Record Write Abandoned	BMM[MCU]	Extended	Due to BMM write errors record couldn't be written fully. Data 1: **Record ID** Data1 Type: BMMRecId Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0903	2307	Sector Rescan On Read	BMM[MCU]	Extended	Directory entry for a given record did not correspond to BMM contents and relevant sector(s) are rescanned. Data 1: **Record ID** Data1 Type: BMMRecId Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0904	2308	New Base Detected	BMM[MCU]	Normal	Control was swapped into a new base.
0905	2309	New WiFi Module	BMM[MCU]	Normal	New WiFi module was swapped.
0906	2310	Sector Found To Be Full	BMM[MCU]	All	Write operation couldn't proceed because the active sector is full. Data 1: **Sector** Data1 Type: ushort
0907	2311	Sector Erase Start	BMM[MCU]	All	Scheduled Sector Erase Operation Begin. Data 1: **Sector** Data1 Type: ushort
0908	2312	Sector Erase End	BMM[MCU]	All	Scheduled Sector Erase Operation End. Data 1: **Sector** Data1 Type: ushort

0909	2313	Active Sector Switched	BMM[MCU]	All	Another sector in the pair became active for a given record. Data 1: **Record ID** Data1 Type: BMMRecId Data 2: **Sector** Data2 Type: ushort
090A	2314	Directory Reconstruction Start	BMM[MCU]	Extended	In-Memory BMM directory reconstruction begin.
090B	2315	Directory Reconstruction Success	BMM[MCU]	Extended	In-Memory BMM directory reconstruction finished successfully.
090C	2316	Operation Aborted On Error	BMM[MCU]	Extended	BMM operation could not be carried out due to BMM access error. Data 1: **Operation** Data1 Type: BMMOp Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
090D	2317	Readback Error On Erase	BMM[MCU]	Extended	Sector page wasn't properly erased. Data 1: **Sector** Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0910	2320	BMM Is Not Ready	BMM[MCU]	Normal	BMM is Not Ready.
0911	2321	BMM Is Ready	BMM[MCU]	Normal	BMM is Ready.
0912	2322	Directory Entry Rebuilt	BMM[MCU]	Extended	Data 1: **Record ID** Data1 Type: BMMRecId Data 2: **Address** Data2 Type: ushort Data 3: **Length in Bytes** Data3 Type: ushort Data 4: **Status** Data4 Type: BMMRecStatus
0913	2323	Invalid Data Found In Sector	BMM[MCU]	Extended	Unexpected Data was found during a sector scan. Data 1: **Sector** Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0914	2324	Mechanical Data Read From BMM	BMM[MCU]	Normal	Mechanical Operation Data was successfuly read from BMM. Data 1:Debug Data Data1 Type: ushort
0915	2325	Mechanical Data Read From BMM Error	BMM[MCU]	Normal	Mechanical Operation Data was not successfuly read from BMM. Data 1:Debug Data Data1 Type: ushort
0916	2326	Mechanical Data Saved To BMM	BMM[MCU]	Normal	Mechanical Operation Data was successfuly saved to BMM.
0917	2327	Mechanical Data Saved BMM Error	BMM[MCU]	Normal	Mechanical Operation Data could not be saved to BMM. Data 1:Debug Data Data1 Type: ushort
0918	2328	Could Not Read DPR Control Register	BMM[MCU]	Extended	Error Reading Data Vital To IMS Interaction.
0919	2329	Could Not Write DPR Control Reg	BMM[MCU]	Extended	Error Writing Data Vital To IMS Interaction.
091A	2330	Incorrect Mechanical Data Size	BMM[MCU]	Extended	Mechanical Data Size Is Inconsistent. Data 1:Debug Data Data1 Type: ushort
091B	2331	Could Not Sign Into Base	BMM[MCU]	Normal	Writing signature to base error after control was swapped into a new base.

					Data 1:Debug Data Data1 Type: ushort
091C	2332	Unfinished Op. Detected On Startup	BMM[MCU]	Extended	There was a BMM operation in progress during the last power down. Data 1: **Operation** Data1 Type: BMMOp
091D	2333	BMM Hardware Is Running	BMM[MCU]	Normal	BMM hardware has been tested successfully.
091E	2334	BMM Hardware Error	BMM[MCU]	Normal	BMM hardware has been tested successfully Data 1:Debug Data Data1 Type: ushort
091F	2335	Record Written Successfully	BMM[MCU]	Extended	A record of a given type was successfully saved to base. Data 1: **Record Type ID** Data1 Type: BMMRecId
0920	2336	Calib Data Successful Load	BMM[MCU]	Normal	Calibration data was successfully loaded from the base.
0921	2337	Calibration Data Load Error	BMM[MCU]	Normal	Not able to load calibration data from base. Data 1:Debug Data Data1 Type: ushort
0922	2338	EOS to BMM Request Problem	BMM[MCU]	Extended	Unexpected data was found during a sector scan. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0923	2339	Operation Aborted On Timeout	BMM[MCU]	Normal	A BMM operation was taking too long and was aborted. All data was discarded. Data 1: **BMM Operation** Data1 Type: BMMOp Data 2: **Record ID** Data2 Type: BMMRecId
0924	2340	BMM DNP Irregularity	BMM[MCU]	Normal	Data 1:Trace Info Data1 Type: ushort Data 2:Trace Info Data2 Type: ushort
0925	2341	Shutdown Processing BMM	BMM[MCU]	Normal	Data 1:Trace Info Data1 Type: ushort
0926	2342	Inconsistent Page Read	BMM[MCU]	Normal	A page read was retried on corrupted data and the retry yielded a different page status. Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0A00	2560	Incorrect RTD Event Information	RTD[MCU]	Normal	
0A01	2561	SCADA Command Enabled	RTD[MCU]	Normal	
0A02	2562	SCADA Command Disabled	RTD[MCU]	Normal	
0A03	2563	Error-Clearing Sequence Start	RTD[MCU]	Normal	
0A04	2564	Error-Clearing Sequence End	RTD[MCU]	Normal	Data 1:Trace Info Data1 Type: ushort
0A05	2565	Error-Clearing	RTD[MCU]	Normal	

		Sequence Retried			
0A06	2566	Emergency Shutdown Detected	RTD[MCU]	Normal	
0A07	2567	Emerge. Shut. Notified All	RTD[MCU]	Normal	
0A08	2568	Orderly Shutdown Detected	RTD[MCU]	Normal	
0A09	2569	Orderly Shutdown Notified All	RTD[MCU]	Normal	
0A0A	2570	Shutdown Cancelled - Restart App	RTD[MCU]	Normal	Data 1:Trace Info Data1 Type: ushort Data 2:Trace Info Data2 Type: ushort Data 3:Trace Info Data3 Type: ushort Data 4:Trace Info Data4 Type: ushort
0A0B	2571	Inconsistent Shutdown Indications	RTD[MCU]	Normal	Data 1:Trace Info Data1 Type: ushort Data 2:Trace Info Data2 Type: ushort Data 3:Trace Info Data3 Type: ushort Data 4:Trace Info Data4 Type: ushort
0A0C	2572	Comm Proc Application Restart	RTD[MCU]	Normal	
0A0D	2573	Current in Direction 1 On	RTD[MCU]	Normal	
0A0E	2574	Current in Direction 1 Off	RTD[MCU]	Normal	
0A0F	2575	Current in Direction 2 On	RTD[MCU]	Normal	
0A10	2576	Current in Direction 2 Off	RTD[MCU]	Normal	
0A11	2577	Command Status Backup UnSuccess	RTD[MCU]	Extended	Data 1:step type Data1 Type: ushort Data 2:step Data2 Type: ushort
0A12	2578	Command Status Restore UnSuccess	RTD[MCU]	Normal	Data 1:step type Data1 Type: ushort Data 2:step Data2 Type: ushort Data 3:instance Data3 Type: ushort
0A13	2579	Command Status Backup Success	RTD[MCU]	Extended	
0A14	2580	Command Status Restore Success	RTD[MCU]	Extended	
0A15	2581	Comm Test Toggle On	RTD[MCU]	Normal	
0A16	2582	Comm Test Toggle Off	RTD[MCU]	Normal	
0A17	2583	PNG Fault Any Pole On	RTD[MCU]	Normal	
0A18	2584	PNG Fault Any Pole Off	RTD[MCU]	Normal	
0A19	2585	Any Automatic Timer in Progress On	RTD[MCU]	Normal	

0A1A	2586	Any Automatic Timer in Progress Off	RTD[MCU]	Normal	
0A1B	2587	Any Phase Overcurrent Timing On	RTD[MCU]	Normal	
0A1C	2588	Any Phase Overcurrent Timing Off	RTD[MCU]	Normal	
0A1D	2589	Any Phase Overcurrent Tripped On	RTD[MCU]	Normal	
0A1E	2590	Any Phase Overcurrent Tripped Off	RTD[MCU]	Normal	
0B00	2816	Disk Error	CFM[MCU]	All	Data 1:Trace Info Data1 Type: ushort Data 2:Error Code Data2 Type: ushort
0B01	2817	File Allocation In Progress	CFM[MCU]	Normal	
0B02	2818	File Allocation Not In Progress	CFM[MCU]	Normal	
0B03	2819	File Allocation Issue	CFM[MCU]	All	Data 1:Trace Info Data1 Type: ushort Data 2:Error Code Data2 Type: ushort
0B04	2820	Compact Flash Card Not Found	CFM[MCU]	Extended	Data 1:Debug Info (Card State) Data1 Type: ushort
0B05	2821	Disk Check Issue	CFM[MCU]	All	Data 1:Error Code Data1 Type: ushort
0B06	2822	Set Bad Disk Condition to On	CFM[MCU]	Normal	Problem with compact flash card.
0B07	2823	Set Bad Disk Condition to Off	CFM[MCU]	Normal	No problem with compact flash card.
0B08	2824	Allocated File Size Exceeded	CFM[MCU]	All	Data 1:File Class Data1 Type: ushort Data 2: **Allocated Size (kB)** Data2 Type: ushort Data 3: **Written Size (kB)** Data3 Type: ushort
0B09	2825	Shutdown Processing CFM	CFM[MCU]	Normal	Data 1:Trace Info Data1 Type: ushort
0B0A	2826	CF Disk Was Tampered With	CFM[MCU]	Normal	Compact Flash Directory Contents Corruption Was Detected on Startup.
0B0B	2827	CF Disk Tampered Indication Cleared	CFM[MCU]	Normal	Compact Flash Directory Contents Corruption Was Not Detected on Startup.
0C00	3072	Control Open Request	IIM[MCU]	Normal	
0C01	3073	Control Open OK	IIM[MCU]	Normal	
0C02	3074	Control Close Request	IIM[MCU]	Normal	
0C03	3075	Control Close OK	IIM[MCU]	Normal	

0C04	3076	Activate Alternate Profile Request	IIM[MCU]	Normal	
0C05	3077	Alternate Profile Active	IIM[MCU]	Normal	
0C06	3078	IT II Ready	EVT[MCU]	Normal	
0C07	3079	IT II Not Ready	EVT[MCU]	Normal	
0C08	3080	Control Operation Request Problem	IIM[MCU]	Normal	Data 1: Data1 Type: ControlCode
0C09	3081	Control Operation Problem	IIM[MCU]	Normal	Data 1: Data1 Type: ControlCode
0C0A	3082	Average Load Reset	IIM[MCU]	Normal	Data 1: Data1 Type: AverageLoad
0C0B	3083	SCADA Cleared Manual Operation	IIM[MCU]	Normal	
0C0C	3084	Any Phase Overcurrent	IIM[MCU]	Normal	Data 1: Data1 Type: Hexushort
0C0D	3085	Overcurrents Cleared	IIM[MCU]	Normal	
0C0E	3086	Any Phase Loss Active	IIM[MCU]	Normal	Data 1: Data1 Type: AnyPhaseLoss
0C0F	3087	Any Phase Loss Cleared	IIM[MCU]	Normal	
0C10	3088	IIM Manual Operation Detected	IIM[MCU]	Normal	
0C11	3089	Manual Operation Cleared	IIM[MCU]	Normal	
0C12	3090	Hot-Line Tag Active	EVT[MCU]	Normal	
0C13	3091	Hot-Line Tag Cleared	EVT[MCU]	Normal	
0C14	3092	Frequency Trip Active	EVT[MCU]	Normal	Data 1: Data1 Type: FreqTripType
0C15	3093	Frequency Trip Cleared MCU	IIM[MCU]	Normal	
0C16	3094	Trip to Lockout Active	IIM[MCU]	Normal	
0C17	3095	Trip to Lockout Cleared	IIM[MCU]	Normal	
0C18	3096	Fault Cycling Reset MCU	IIM[MCU]	Normal	
0C19	3097	Fault Cycling Active MCU	IIM[MCU]	Normal	
0C1A	3098	IntelliRupter Status Open	IIM[MCU]	Normal	
0C1B	3099	IntelliRupter Status Closed	IIM[MCU]	Normal	
0C1C	3100	IntelliRupter In Reset State	IIM[MCU]	Normal	
0C1D	3101	IntelliRupter Not In Reset State	IIM[MCU]	Normal	

0C1E	3102	Instant Replay Status Update	IIM[MCU]	All	Data 1:Sw. Status Data1 Type: ushort Data 2:OC Status Data2 Type: ushort Data 3:VL Status Data3 Type: ushort
0C1F	3103	Manual Operation Report	IIM[MCU]	Normal	
0C20	3104	Switch Not Normal State Active	IIM[MCU]	All	Switch not in normal state active Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0C21	3105	Switch Not Normal State Inactive	IIM[MCU]	All	Switch not in normal state inactive Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0C22	3106	Low frequency indication active	IIM[MCU]	All	Low frequency indication active Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0C23	3107	Low frequency indication Inactive	IIM[MCU]	All	Low frequency indication Inactive Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0C24	3108	RTL Xmit Blocked	DAT[MCU]	All	Data 1:Debug Data Data1 Type: ManualOp Data 2:Debug Data Data2 Type: HLT Data 3:Debug Data Data3 Type: FreqTrip Data 4:Debug Data Data4 Type: NoMaster
0C25	3109	PR Unable to Clear After HLT Removal	IIM[MCU]	All	Data 1:Debug Data Data1 Type: ClearPRonHLTRem Data 2:Debug Data Data2 Type: RTLFromSCADAPR Data 3:Debug Data Data3 Type: FreqTrip Data 4:Debug Data Data4 Type: ushort
0C26	3110	PR Cleared After HLT Removal	IIM[MCU]	All	Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0C2A	3114	System Voltage Unrecognized Active	IIM[MCU]	All	System Voltage Unrecognized Active Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0C2B	3115	System Voltage Unrecognized Inactive	IIM[MCU]	All	System Voltage Unrecognized Inactive Data 1:Debug Data Data1 Type: ushort

					Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0C2C	3116	Additional Info	IIM[MCU]	All	SAdditional Info Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ushort
0E01	3585	Xfer Trip PR Initiated (DG POI) Active	DAT[MCU]	Normal	Xfer Trip PR Initiated (DG POI) Active Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
0E02	3586	Xfer Trip PR Initiated (DG POI) Inactive	DAT[MCU]	Normal	Xfer Trip PR Initiated (DG POI) Inactive Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
0E03	3587	Transfer Trip Sent Active	DAT[MCU]	Normal	Transfer Trip Sent Active Data 1: Data1 Type: RTUAddress Data 2: Data2 Type: SWPos Data 3: Data3 Type: RTUAddress Data 4: Data4 Type: ushort
0E04	3588	Transfer Trip Sent Inactive	DAT[MCU]	Normal	Transfer Trip Sent Inactive Data 1: Data1 Type: RTUAddress Data 2: Data2 Type: SWPos Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
0E05	3589	DG Reconnect Disqualified On Fault	DAT[MCU]	Normal	DG Reconnect Disqualified On Fault Data 1: Data1 Type: TeamNumberWithUnknown Data 2: Data2 Type: BooleanTrueFalse Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
0E06	3590	Sw1 Auto Manl Op. Clear Timer Stopped	DAT[MCU]	Normal	Sw1 Auto Manual Operation Clearing Timer Stopped Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
0E07	3591	Sw2 Auto Manl Op. Clear Timer Stopped	DAT[MCU]	Normal	Sw2 Auto Manual Operation Clearing Timer Stopped Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
0E08	3592	Sw2 Auto Manl Op. Clear Timer Started	DAT[MCU]	Normal	Sw2 Auto Manual Operation Clearing Timer Started Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
1001	4097	Power Status Change	IPM[MCU]	Normal	

					Data 1:Digital In State Data1 Type: ushort
1002	4098	Power Status Recover	IPM[MCU]	Normal	Data 1:Digital In State Data1 Type: ushort
1003	4099	Control Power Loss	IPM[MCU]	Normal	
1004	4100	Control Power Recover	IPM[MCU]	Normal	
1005	4101	Main Power Bus Low	IPM[MCU]	Normal	Analog Value Main Power Bus Low. Data 1:Main Power Bus Voltage Data1 Type: ushort
1006	4102	Main Power Bus Normal	IPM[MCU]	Normal	Analog Value Main Power Bus Normal. Data 1:Main Power Bus Voltage Data1 Type: ushort
1007	4103	MCU 3.3 Voltage Supply Out of Range	IPM[MCU]	Normal	Analog Value MCU_3V3 out of Range. Data 1:MCU 3.3 Voltage Data1 Type: ushort
1008	4104	MCU 3.3 Voltage Supply Normal	IPM[MCU]	Normal	Analog Value MCU_3V3 in Range. Data 1:MCU 3.3 Voltage Data1 Type: ushort
1009	4105	MCU 2.5 Voltage Supply Out of Range	IPM[MCU]	Normal	Analog Value MCU_2V5 out of Range. Data 1:MCU 2.5 Voltage Data1 Type: ushort
100A	4106	MCU 2.5 Voltage Supply Normal	IPM[MCU]	Normal	Analog Value MCU_2V5 in Range. Data 1:MCU 2.5 Voltage Data1 Type: ushort
100B	4107	MCU 1.8 Voltage Supply Out of Range	IPM[MCU]	Normal	Analog Value MCU_1V8 out of Range. Data 1:MCU 1.8 Voltage Data1 Type: ushort
100C	4108	MCU 1.8 Voltage Supply Normal	IPM[MCU]	Normal	Analog Value MCU_1V8 in Range. Data 1:MCU 1.8 Voltage Data1 Type: ushort
100D	4109	MCU 1.35 Voltage Supply Out of Range	IPM[MCU]	Normal	Analog Value MCU_1V35 out of Range. Data 1:MCU 1.35 Voltage Data1 Type: ushort
100E	4110	MCU 1.35 Voltage Supply Normal	IPM[MCU]	Normal	Analog Value MCU_1V35 in Range. Data 1:MCU 1.35 Voltage Data1 Type: ushort
100F	4111	MCU 1.2 Voltage Supply Out of Range	IPM[MCU]	Normal	Analog Value MCU_1V2 out of Range. Data 1:MCU 1.2 Voltage Data1 Type: ushort
1010	4112	MCU 1.2 Voltage Supply Normal	IPM[MCU]	Normal	Analog Value MCU_1V2 in Range. Data 1:MCU 1.2 Voltage Data1 Type: ushort
1011	4113	MCU_0V6 Voltage Supply Out of Range	IPM[MCU]	Normal	Analog Value MCU_0V6 out of Range. Data 1:MCU_0V6 Voltage Data1 Type: ushort
1012	4114	MCU_0V6 Voltage Supply Normal	IPM[MCU]	Normal	Analog Value MCU_0V6 in Range. Data 1:MCU_0V6 Voltage Data1 Type: ushort
1013	4115	MCU_1V0 Voltage Supply Out of Range	IPM[MCU]	Normal	Analog Value MCU_1V0 out of Range. Data 1:MCU_1V0 Voltage Data1 Type: ushort
1014	4116	MCU_1V0 Voltage Supply Normal	IPM[MCU]	Normal	Analog Value MCU_1V0 in Range. Data 1:MCU_1V0 Voltage Data1 Type: ushort

1015	4117	DSP_5V Voltage Supply Out of Range	IPM[MCU]	Normal	Analog Value DSP_5V out of Range. Data 1:DSP_5V Voltage Data1 Type: ushort
1016	4118	DSP_5V Voltage Supply Normal	IPM[MCU]	Normal	Analog Value DSP_5V in Range. Data 1:DSP_5V Voltage Data1 Type: ushort
1017	4119	DSP_3V3 Voltage Supply Out of Range	IPM[MCU]	Normal	Analog Value DSP_3V3 out of Range. Data 1:DSP_3V3 Voltage Data1 Type: ushort
1018	4120	DSP_3V3 Voltage Supply Normal	IPM[MCU]	Normal	Analog Value DSP_3V3 in Range. Data 1:DSP_3V3 Voltage Data1 Type: ushort
1019	4121	DSP_2V5 Voltage Supply Out of Range	IPM[MCU]	Normal	Analog Value DSP_2V5 out of Range. Data 1:DSP_2V5 Voltage Data1 Type: ushort
101A	4122	DSP_2V5 Voltage Supply Normal	IPM[MCU]	Normal	Analog Value DSP_2V5 in Range. Data 1:DSP_2V5 Voltage Data1 Type: ushort
101B	4123	DSP_1V8 Voltage Supply Out of Range	IPM[MCU]	Normal	Analog Value DSP_1V8 out of Range. Data 1:DSP_1V8 Voltage Data1 Type: ushort
101C	4124	DSP_1V8 Voltage Supply Normal	IPM[MCU]	Normal	Analog Value DSP_1V8 in Range. Data 1:DSP_1V8 Voltage Data1 Type: ushort
101D	4125	DSP_P15V Voltage Supply Out of Range	IPM[MCU]	Normal	Analog Value DSP_P15V out of Range. Data 1:DSP_P15V Voltage Data1 Type: ushort
101E	4126	DSP_P15V Voltage Supply Normal	IPM[MCU]	Normal	Analog Value DSP_P15V in Range. Data 1:DSP_P15V Voltage Data1 Type: ushort
101F	4127	DSP_M15V Voltage Supply Out of Range	IPM[MCU]	Normal	Analog Value DSP_M15V out of Range. Data 1:DSP_M15V Voltage Data1 Type: ushort
1020	4128	DSP_M15V Voltage Supply Normal	IPM[MCU]	Normal	Analog Value DSP_M15V in Range. Data 1:DSP_M15V Voltage Data1 Type: ushort
1021	4129	DSP_1V2 Voltage Supply Out of Range	IPM[MCU]	Normal	Analog Value DSP_1V2 out of Range. Data 1:DSP_1V2 Voltage Data1 Type: ushort
1022	4130	DSP_1V2 Voltage Supply Normal	IPM[MCU]	Normal	Analog Value DSP_1V2 in Range. Data 1:DSP_1V2 Voltage Data1 Type: ushort
1023	4131	P15 Voltage Supply Out of Range	IPM[MCU]	Normal	Analog Value P15 out of Range. Data 1:P15 Voltage Data1 Type: ushort
1024	4132	P15 Voltage Supply Normal	IPM[MCU]	Normal	Analog Value P15 in Range. Data 1:P15 Voltage Data1 Type: ushort
1025	4133	P5 Voltage Supply Out of Range	IPM[MCU]	Normal	Analog Value P5 out of Range. Data 1:P5 Voltage Data1 Type: ushort
1026	4134	P5 Voltage Supply Normal	IPM[MCU]	Normal	Analog Value P5 in Range. Data 1:P5 Voltage Data1 Type: ushort
1027	4135	CCP_PWR Voltage Supply Out of Range	IPM[MCU]	Normal	Analog Value CCP_PWR out of Range.

					Data 1:CCP_PWR Voltage Data1 Type: ushort
1028	4136	CCP_PWR Voltage Supply Normal	IPM[MCU]	Normal	Analog Value CCP_PWR in Range. Data 1:CCP_PWR Voltage Data1 Type: ushort
1029	4137	PG_5V6 Voltage Supply Out of Range	IPM[MCU]	Normal	Analog Value PG_5V6 out of Range. Data 1:PG_5V6 Voltage Data1 Type: ushort
102A	4138	PG_5V6 Voltage Supply Normal	IPM[MCU]	Normal	Analog Value PG_5V6 in Range. Data 1:PG_5V6 Voltage Data1 Type: ushort
102B	4139	PG_1V3 Voltage Supply Out of Range	IPM[MCU]	Normal	Analog Value PG_1V3 out of Range. Data 1:PG_1V3 Voltage Data1 Type: ushort
102C	4140	PG_1V3 Voltage Supply Normal	IPM[MCU]	Normal	Analog Value PG_1V3 in Range. Data 1:PG_1V3 Voltage Data1 Type: ushort
102D	4141	PG_5 Voltage Supply Out of Range	IPM[MCU]	Normal	Analog Value PG_5 out of Range. Data 1:PG_5 Voltage Data1 Type: ushort
102E	4142	PG_5 Voltage Supply Normal	IPM[MCU]	Normal	Analog Value PG_5 in Range. Data 1:PG_5 Voltage Data1 Type: ushort
102F	4143	BMM_3V3 Voltage Supply Out of Range	IPM[MCU]	Normal	Analog Value BMM_3V3 out of Range. Data 1:BMM_3V3 Voltage Data1 Type: ushort
1030	4144	BMM_3V3 Voltage Supply Normal	IPM[MCU]	Normal	Analog Value BMM_3V3 in Range. Data 1:BMM_3V3 Voltage Data1 Type: ushort
1031	4145	IPM:AC Power Present	IPM[MCU]	Normal	Data 1:Digital In State Data1 Type: ushort
1032	4146	IPM:AC Power Not Present	IPM[MCU]	Normal	Data 1:Digital In State Data1 Type: ushort
1033	4147	IPM:Battery Disconnect	IPM[MCU]	Normal	
1034	4148	IPM: Battery Connected	IPM[MCU]	Normal	
1035	4149	Capacitor Voltage Low	IPM[MCU]	Normal	
1036	4150	Capacitor Voltage Normal	IPM[MCU]	Normal	
1037	4151	IPM in Monitor Mode	IPM[MCU]	Normal	
1038	4152	IPM in Operation Mode	IPM[MCU]	Normal	
1041	4161	Nonfunctional IPM	IPM[MCU]	Normal	IPM not functioning. Data 1:Digital In State Data1 Type: ushort
1042	4162	Clear Nonfunctional IPM	IPM[MCU]	Normal	IPM ok. Data 1:Digital In State Data1 Type: ushort
1201	4609	Originating a SRC Runner	NET[MCU]	All	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort

					Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1202	4610	Received Old Runner	NET[MCU]	All	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1203	4611	Received Duplicate Runner	NET[MCU]	All	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1204	4612	Received New Runner	NET[MCU]	All	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1205	4613	Forwarding a Received Runner	NET[MCU]	All	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1206	4614	Originating an Endload Runner	NET[MCU]	All	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1207	4615	COS Cleared	NET[MCU]	All	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1208	4616	Team Config Netlist Mismatch	NET[MCU]	All	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1209	4617	COS Active	NET[MCU]	All	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
120A	4618	Missing Runners	NET[MCU]	Normal	Data 1: **This state provides a user programmable time delay before starting the runners repeated after each successful round of collection + distribution** Data1 Type: StatusFeedbackArea Data 2: **Runner's Quantity** Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort

120B	4619	All Runners Received	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
120C	4620	NETLIST no alt source found	NET[MCU]	All	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
120D	4621	NETLIST alt source result	NET[MCU]	All	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
120E	4622	Building COS Runner	NET[MCU]	All	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
120F	4623	COS Reported by IT	NET[MCU]	All	Data 1: **Local Load COS** Data1 Type: ushort Data 2: **Average Load** Data2 Type: ushort Data 3: **3-Phase Average Load** Data3 Type: ushort Data 4: **Team Member Number** Data4 Type: TeamRecord
1210	4624	COS Received in Runner	NET[MCU]	All	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1211	4625	Forwarding Dup. COS Runner	NET[MCU]	All	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1212	4626	Loc Netlist Old. Need it From RTU	NET[MCU]	All	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1213	4627	New Netlist Request From RTU	NET[MCU]	All	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1214	4628	Netlist Record Sent	NET[MCU]	All	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort

					Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1215	4629	Netlist Record Received	NET[MCU]	All	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1216	4630	ITII Mode is Active	NET[MCU]	Normal	Data 1:Instance Data1 Type: Instance Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1217	4631	ITII Mode is Inactive	NET[MCU]	Normal	Data 1:Instance Data1 Type: Instance Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1218	4632	NET: Missing Runners in Adj Net Active	NET[MCU]	All	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1219	4633	NET: Missing Runners Adj Net Inactive	NET[MCU]	All	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1220	4640	NETX Adj data delivery runner is intitiated	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1221	4641	NETX Adj Data Delivery of Runner's Timeout	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1222	4642	NETX Indiv Adj Data Runner Path Timeout	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1223	4643	NETX Indiv Adj Data Runner Path Present	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1241	4673	NETV: Netlist Changed	NET[MCU]	Normal	Data 1: **Netview number of devices/switches in DivisionNet**

					Data1 Type: NumOfDevices Data 2: **Number of entries in the D-W (Device-Wire) tables** Data2 Type: NumOfWirePairs Data 3: **Number of Teams** Data3 Type: NumOfTeams Data 4:Null Data4 Type: ushort
1242	4674	NETV: Network Config. Changed	NET[MCU]	Normal	Data 1: **Number of rows in table for DivisionNet** Data1 Type: NumOfRows Data 2: **Number of power sources in DivisionNet** Data2 Type: NumOfPowSrc Data 3: **Net View Analyzer** Data3 Type: NetViewAnalyzer Data 4:Number is there for debugging use Data4 Type: ushort
1250	4688	NETX dispatch intiated	NET[MCU]	Normal	Data 1: **Net Object Type** Data1 Type: RunnerType Data 2: **Source RTU Address** Data2 Type: RTUAddress Data 3: **Source Node ID** Data3 Type: SrcNodeID Data 4: **Destination Node ID** Data4 Type: DestNodeID
1251	4689	NETX EPD netlist received	NET[MCU]	Normal	Data 1: **Net Object ID** Data1 Type: ObjID Data 2: **Size of the arriving object in bytes, also a flag/signal of arrival to State machine A** Data2 Type: SizeOfObject Data 3: **Net Object Length** Data3 Type: ObjectLength Data 4: **Bufsiz** Data4 Type: bufsiz
1252	4690	NETX Net list trouble	NET[MCU]	Normal	Data 1: **Net Object ID** Data1 Type: ObjID Data 2: **Size of the arriving object in bytes, also a flag/signal of arrival to State machine A** Data2 Type: SizeOfObject Data 3: **Net Object Length** Data3 Type: ObjectLength Data 4: **Bufsiz** Data4 Type: bufsiz
1253	4691	NETX bad runner index	NET[MCU]	Normal	Data 1: **Runner Number** Data1 Type: RunnerNumber Data 2: **Feeder Net ID** Data2 Type: FeederNetID Data 3: **Feeder Net CRC** Data3 Type: FeederNetCRC Data 4:Null Data4 Type: ushort
1254	4692	NETX node index not found	NET[MCU]	Normal	Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Destination Node ID** Data2 Type: DestNodeID Data 3: **Node Index** Data3 Type: NodeIndex Data 4: **Net Object Type** Data4 Type: RunnerType
1255	4693	NETX bad object data length	NET[MCU]	Normal	Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Net Object Length** Data2 Type: ObjectLength Data 3: **Data Length** Data3 Type: DataLength Data 4: **Net Object Type** Data4 Type: RunnerType
1256	4694	NETX new netlist delivery	NET[MCU]	Normal	Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Destination Node ID** Data2 Type: DestNodeID Data 3: **Runner Number** Data3 Type: RunnerNumber Data 4: **Size of runner in RTU addresses** Data4 Type: RTUAddress

1257	4695	NETX chk for comm chk runner's passing	NET[MCU]	Normal	NETX check for communication check runner's passing Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Destination Node ID** Data2 Type: DestNodeID Data 3: **Runner Number** Data3 Type: RunnerNumber Data 4: **Feeder Net ID** Data4 Type: FeederNetID
1258	4696	NETX chk for comm chk runner's return	NET[MCU]	Normal	NETX check for communication check runner's return Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Destination Node ID** Data2 Type: DestNodeID Data 3: **Runner Number** Data3 Type: RunnerNumber Data 4: **Feeder Net ID** Data4 Type: FeederNetID
1259	4697	NETX intiate communication check runner	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
125A	4698	NEX communication check runner's timeout	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
125B	4699	NETX communication check runner complete	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
125C	4700	NETX activation runner return	NET[MCU]	Normal	Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Destination Node ID** Data2 Type: DestNodeID Data 3: **Runner Number** Data3 Type: RunnerNumber Data 4: **Size of runner in RTU addresses** Data4 Type: RTUAddress
125D	4701	NETX activation of the runner's passing	NET[MCU]	Normal	Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Destination Node ID** Data2 Type: DestNodeID Data 3: **Runner Number** Data3 Type: RunnerNumber Data 4: **Size of runner in RTU addresses** Data4 Type: RTUAddress
125E	4702	NETX activation of runner's intiation	NET[MCU]	Normal	Data 1: **RETV:AT EPD Launch all the Activation Runners to the next RTU in line** Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
125F	4703	NETX activation of runner is complete	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1260	4704	NETX activation of runner's timout	NET[MCU]	Normal	

					Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1261	4705	NETX collection runner return	NET[MCU]	Normal	Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Destination Node ID** Data2 Type: DestNodeID Data 3: **Runner Number** Data3 Type: RunnerNumber Data 4: **FeederNetID** Data4 Type: FeederNetID
1262	4706	NETX collection runner's passing	NET[MCU]	Normal	Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Destination Node ID** Data2 Type: DestNodeID Data 3: **Runner Number** Data3 Type: RunnerNumber Data 4: **FeederNetID** Data4 Type: FeederNetID
1263	4707	NETX collection as the runner intiates	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1264	4708	NETX collection of runner's timeout	NET[MCU]	Normal	Data 1: **RETV:AT EPD Launch all the Activation Runners to the next RTU in line** Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1265	4709	NETX data delivery runner's return	NET[MCU]	Normal	Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Destination Node ID** Data2 Type: DestNodeID Data 3: **Runner Number** Data3 Type: RunnerNumber Data 4: **FeederNetID** Data4 Type: FeederNetID
1266	4710	NETX data delivery of runner's passing	NET[MCU]	Normal	Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Destination Node ID** Data2 Type: DestNodeID Data 3: **Runner Number** Data3 Type: RunnerNumber Data 4: **FeederNetID** Data4 Type: FeederNetID
1267	4711	NETX data delievery runner is intitiated	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1268	4712	NETX data delivery of runner's timeout	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1269	4713	NETX Feeder Net delivery to intiate rnr	NET[MCU]	Normal	NETX Feeder Net delivery to intiate runner Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort

126A	4714	NETX Feeder Net runner delivery complete	NET[MCU]	Normal	>NETX Feeder Net delivery of runner is complete Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
126B	4715	NETX Feeder Net delivery rnr's timeout	NET[MCU]	Normal	NETX Feeder Net delivery runner's timeout Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
126C	4716	NETX data runner's cycle is complete	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
126D	4717	NETX continue adjacent distributrers	NET[MCU]	Normal	Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Destination Node ID** Data2 Type: DestNodeID Data 3: **Runner Number** Data3 Type: RunnerNumber Data 4:Null Data4 Type: ushort
126E	4718	NETX inti adj Feeder Net distributers	NET[MCU]	Normal	NETX intiate adjacent Feeder Net distributers Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Net Object ID** Data2 Type: ObjID Data 3: **Destination Node ID** Data3 Type: DestNodeID Data 4: **Net Object Length** Data4 Type: ObjectLength
126F	4719	NETX init adjacent data block reporter	NET[MCU]	Normal	NETX intiate adjacent data block reporter Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Net Object ID** Data2 Type: ObjID Data 3: **Destination Node ID** Data3 Type: DestNodeID Data 4: **Net Object Length** Data4 Type: ObjectLength
1270	4720	NETX fwd adjacent data block reporter	NET[MCU]	Normal	NETX forward adjacent data block reporter Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Net Object ID** Data2 Type: ObjID Data 3: **Destination Node ID** Data3 Type: DestNodeID Data 4: **Net Object Length** Data4 Type: ObjectLength
1271	4721	NETX sync net list to DAT delayed	NET[MCU]	Normal	Data 1: **SyncStat** Data1 Type: syncstat Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1272	4722	NETX sync net list to DAT is not good	NET[MCU]	Normal	Data 1: **SyncStat** Data1 Type: syncstat Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1273	4723	NETX netlist copy request	NET[MCU]	Normal	Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Net object ID** Data2 Type: ObjID

					Data 3: **Feeder Net ID** Data3 Type: FeederNetID Data 4: **Feeder Net CRC** Data4 Type: FeederNetCRC
1274	4724	NETX netlist copy response	NET[MCU]	Normal	Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Net Object ID** Data2 Type: ObjID Data 3: **Feeder Net ID** Data3 Type: FeederNetID Data 4: **Feeder Net CRC** Data4 Type: FeederNetCRC
1275	4725	NETX Feeder Net ID and CRC mismatch	NET[MCU]	Normal	Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Feeder Net ID** Data2 Type: FeederNetID Data 3: **Feeder Net CRC** Data3 Type: FeederNetCRC Data 4: **Net Object Type** Data4 Type: RunnerType
1276	4726	NETX netlist reporter returned	NET[MCU]	Normal	Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Net Object ID** Data2 Type: ObjID Data 3: **Destination Node ID** Data3 Type: DestNodeID Data 4: **Object Length** Data4 Type: ObjectLength
1277	4727	NETX forward net list reporter	NET[MCU]	Normal	Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Net Object ID** Data2 Type: ObjID Data 3: **Destination Node ID** Data3 Type: DestNodeID Data 4: **Object Length** Data4 Type: ObjectLength
1278	4728	NETX net list copy intiate	NET[MCU]	Normal	Data 1: **Feeder Net ID** Data1 Type: FeederNetID Data 2: **Feeder Net CRC** Data2 Type: FeederNetCRC Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1279	4729	NETX report adj netlist distributers	NET[MCU]	Normal	NETX report adjacent netlist distributers Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
127A	4730	NETX report adjacent data block	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1280	4736	Configuration is in progress	NET[MCU]	Normal	Data 1: **Instance** Data1 Type: Instance Data 2: **Source RTU Address** Data2 Type: RTUAddress Data 3: **Feeder Net CRC** Data3 Type: FeederNetCRC Data 4: **Feeder Net ID** Data4 Type: FeederNetID
1281	4737	Configuration is not in progress	NET[MCU]	Normal	Data 1: **Previous State** Data1 Type: StatusFeedbackArea Data 2: **Feeder Net ID** Data2 Type: FeederNetID Data 3: **Feeder Net CRC** Data3 Type: FeederNetCRC Data 4:Null Data4 Type: ushort
1283	4739	Settings Accepted	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort

					Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1284	4740	Settings Received	NET[MCU]	Normal	If Data 4 reads 10 then Data 4 = Net Object State Revived Command Data 1: **Net View number of devices in DivisionNet** Data1 Type: ushort Data 2: **Error Code 1** Data2 Type: Hexushort Data 3: **Error Code 2** Data3 Type: Hexushort Data 4:Null Data4 Type: ushort
1285	4741	Netlist Propagation Enabled	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1286	4742	Netlist Propagation Disabled	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1290	4752	Netlist Loaded From BMM	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1291	4753	Netlist BMM Load Issue	NET[MCU]	Normal	Data Field 1 could be the BMM_Result in which case please refer to the "BMMRESULT" DataType Data 1: **Bmm_State** Data1 Type: BMMSTATE Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1292	4754	Netlist Saved To BMM	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
1293	4755	Netlist BMM Save Issue	NET[MCU]	Normal	Data Field 1 could be the BMM_Result in which case please refer to the "BMMRESULT" DataType Data 1: **Bmm_State** Data1 Type: BMMSTATE Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
12A0	4768	NETO buffer pool intialized	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
12A1	4769	NETO combined buffers	NET[MCU]	Normal	Data 1: **Loop Count** Data1 Type: ushort Data 2: **Del Count** Data2 Type: ushort

					Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
12A2	4770	NETO buffer pool length is bad	NET[MCU]	Normal	Data 1: **Total Length** Data1 Type: totallen Data 2: **Pool Size** Data2 Type: ushort Data 3: **Cumulative Free Buffer Space** Data3 Type: netobuffFree Data 4: **Loop Count** Data4 Type: ushort
12A3	4771	NETO does not enough space to store obj	NET[MCU]	Normal	NETO does not have enough space to store object Data 1: **Net Fragment ID** Data1 Type: netfragID Data 2: **Source Net ID** Data2 Type: SrcNodeID Data 3: **Cumulative Free Buffer Space** Data3 Type: netobuffFree Data 4: **Data Length** Data4 Type: DataLength
12A4	4772	NETO object buffering is full	NET[MCU]	Normal	Data 1: **Net Fragment ID** Data1 Type: netfragID Data 2: **Source Net ID** Data2 Type: SrcNodeID Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
12A5	4773	NETO bad store request	NET[MCU]	Normal	Data 1: **Net Fragment ID** Data1 Type: netfragID Data 2: **Source Net ID** Data2 Type: SrcNodeID Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
12A6	4774	NETO data buffer is full	NET[MCU]	Normal	Data 1: **Net Fragment ID** Data1 Type: netfragID Data 2: **Source Net ID** Data2 Type: SrcNodeID Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
12A7	4775	NETO object handed up	NET[MCU]	Normal	Data 1: **Net Object State** Data1 Type: ObjState Data 2: **Source RTU Address** Data2 Type: RTUAddress Data 3: **Net Object ID** Data3 Type: ObjID Data 4:Null Data4 Type: ushort
12A8	4776	NETO deleted object FIR only	NET[MCU]	Normal	Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Net Object ID** Data2 Type: ObjID Data 3: **Net Fragment ID** Data3 Type: netfragID Data 4:Null Data4 Type: ushort
12A9	4777	NETO bad fragment added	NET[MCU]	Normal	Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Net Object ID** Data2 Type: ObjID Data 3: **Net Fragment ID** Data3 Type: netfragID Data 4: **Net Fragment ID** Data4 Type: netfragID
12AA	4778	NETO fragment not found	NET[MCU]	Normal	Data3 could equal the NetObject State if we are talking about the NETxVerboseLog Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Net Object ID** Data2 Type: ObjID Data 3: **Net Fragment ID** Data3 Type: netfragID Data 4:Null Data4 Type: ushort

12AB	4779	NETO object fragment sent	NET[MCU]	Normal	Data 1: **Net Fragment ID** Data1 Type: netfragID Data 2: **Net object ID** Data2 Type: ObjID Data 3: **Net object type** Data3 Type: RunnerType Data 4: **Data Length** Data4 Type: DataLength
12AC	4780	NETO object fragment was declined	NET[MCU]	Normal	Data 1: **xmtresultcode** Data1 Type: xmtresultcode Data 2: **Destination RTU Address** Data2 Type: RTUAddress Data 3: **Net Fragment ID** Data3 Type: netfragID Data 4: **Data Length** Data4 Type: DataLength
12AD	4781	NETO object list's timeout	NET[MCU]	Normal	Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Net Fragment ID** Data2 Type: netfragID Data 3: **Net Object ID** Data3 Type: ObjID Data 4: **Net Object State** Data4 Type: ObjState
12B0	4784	NETD ACK has failed	NET[MCU]	Normal	Data 1: **Destination RTU Address** Data1 Type: RTUAddress Data 2: **DataLength** Data2 Type: DataLength Data 3: **Result= (netdSendObject(DNPGetLocalAddress(DNPADDRGOLDEN), destAddr, DNPCIDNETOBJMGNT, datatosend, (NETOBJHEADDATALEN + 1)));** Data3 Type: ushort Data 4:Null Data4 Type: ushort
12B1	4785	NETD sending object	NET[MCU]	Normal	Data 1: **Destination RTU Address** Data1 Type: RTUAddress Data 2: **Data Length** Data2 Type: DataLength Data 3: **Result=DNPXmtMultiService** Data3 Type: ushort Data 4: **Connection ID** Data4 Type: connectID
12B2	4786	NETD recieved object	NET[MCU]	Normal	Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Net Object ID** Data2 Type: ObjID Data 3: **Net Object Type** Data3 Type: RunnerType Data 4: **Data Length** Data4 Type: DataLength
1701	5889	WiFi Intrusion Attempt	WFM[MCU]	Normal	Alarms reported from WiFi module for replay attack or authentication error. Data 1:Debug Data Data1 Type: ushort
1704	5892	WiFi User Connected	WFM[MCU]	Normal	WiFi user connected.
1705	5893	WiFi User Disconnected	WFM[MCU]	Normal	WiFi user disconnected.
1707	5895	WiFi Intrusion Active	WFM[MCU]	Normal	WiFi intrusion active.
1708	5896	WiFi Intrusion Cleared	WFM[MCU]	Normal	WiFi intrusion cleared.
1709	5897	WiFi SCADA Disable	WFM[MCU]	Normal	WiFi disabled from SCADA.
170A	5898	WiFi SCADA Enable	WFM[MCU]	Normal	WiFi enabled from SCADA.
1751	5969	WiFi Test	WFM[MCU]	Normal	

1800	6144	GPS Enabled by IntelliLINK	UTL[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort
1801	6145	GPS Disabled by IntelliLINK	UTL[MCU]	Normal	Data 1:Debug Data Data1 Type: ushort
1802	6146	GPS Not Active Time Source On	UTL[MCU]	Normal	GPS is not the active time source set. Data 1: Data1 Type: TimeSource Data 2: Data2 Type: GPSStatus Data 3: Data3 Type: FixQuality
1803	6147	GPS Not Active Time Source Off	UTL[MCU]	Normal	GPS is not the active time source cleared. Data 1: Data1 Type: TimeSource Data 2: Data2 Type: GPSStatus Data 3: Data3 Type: FixQuality
1804	6148	GPS Status Changed	UTL[MCU]	Normal	GPS Status Changed. Data 1: Data1 Type: TimeSource Data 2: Data2 Type: GPSStatus Data 3: Data3 Type: FixQuality Data 4: Data4 Type: OneHexByte
1900	6400	Loop Restoration Enabled	EVT[MCU]	Normal	Enable Loop Restoration.
1901	6401	Loop Restoration Disabled	EVT[MCU]	Normal	Prohibit Loop Restoration.
1902	6402	Loop Restoration Ready	EVT[MCU]	Normal	Loop Restoration is Ready.
1903	6403	Loop Restoration Not Ready	EVT[MCU]	Normal	Loop Restoration is Not Ready.
1904	6404	Loop Restoration Timing	EVT[MCU]	Normal	Loop Restoration is Timing.
1905	6405	Loop Restoration Not Timing	EVT[MCU]	Normal	Loop Restoration is Not Timing.
1906	6406	Loop Restoration Reconfigured	EVT[MCU]	Normal	Loop Restoration is Reconfigured.
1907	6407	Loop Restoration Not Reconfigured	EVT[MCU]	Normal	Loop Restoration is Not Reconfigured.
1908	6408	Skip Test On Close Command Rejected	LRM[MCU]	Normal	Data 1: **Test Number** Data1 Type: ushort Data 2: **DPR Delayed Return Code** Data2 Type: ushort Data 3: **DPR Return Code** Data3 Type: ushort
1909	6409	Result of Test Indeterminate	LRM[MCU]	Normal	Data 1: **Test Number** Data1 Type: ushort
190A	6410	Loop Restoration Clear Manual Op	LRM[MCU]	Normal	
190B	6411	Loop Restoration Close in Profile	EVT[MCU]	Normal	Data 1: **Closing Profile** Data1 Type: ushort
190C	6412	Max. Time For Loop Rest Reached	LRM[MCU]	Normal	
190D	6413	Manual Lever Reenable Detected	EVT[MCU]	Normal	

190E	6414	LRM Manual Operation Detected	LRM[MCU]	Normal	
190F	6415	All Tests Performed	LRM[MCU]	Normal	
1910	6416	Suspend Test	LRM[MCU]	Normal	Data 1: **Step** Data1 Type: ushort Data 2: **Test Number** Data2 Type: ushort
1911	6417	Resume Test	LRM[MCU]	Normal	Data 1: **Step** Data1 Type: ushort Data 2: **Test Number** Data2 Type: ushort
1912	6418	Skip Test On No Voltage	LRM[MCU]	Normal	Data 1: **Test Number** Data1 Type: ushort
1913	6419	Cmd Rejected by ATX or Line Faulted	EVT[MCU]	Normal	Data 1: **Command Rejected by ATX** Data1 Type: ushort Data 2: **Blocked by Synch Check** Data2 Type: ushort Data 3: **PulseClosing Detected Fault** Data3 Type: ushort Data 4: **Fault Detected in Closing Profile** Data4 Type: ushort
1914	6420	Close Successful and GP Active	EVT[MCU]	Normal	
1915	6421	HLT Detected	LRM[MCU]	Normal	
1916	6422	GP Change While Timing Detected	LRM[MCU]	Normal	
1917	6423	Op Delayed by Low Energy Detected	LRM[MCU]	Normal	
1918	6424	Non-Trigger Lockout Detected	LRM[MCU]	Normal	
1919	6425	Tripped to Lockout Not Overcurrent	LRM[MCU]	Normal	Data 1: **Fault Type Bits** Data1 Type: ushort
191A	6426	Register Control Pt Unsuccess	LRM[MCU]	Extended	Data 1: **Point Number** Data1 Type: ushort Data 2: **DNP Return Code** Data2 Type: ushort
191B	6427	DPR Command Unsuccessful	LRM[MCU]	Extended	Data 1: **DPR Return Code** Data1 Type: ushort Data 2: **DPR Delayed Return Code** Data2 Type: ushort Data 3: **DPR Function** Data3 Type: ushort Data 4: **DPR Function Arg** Data4 Type: ushort
191C	6428	Loop Close Blocked - Underfrequency On	EVT[MCU]	Normal	Loop Restoration Close Blocked By Underfrequency.
191D	6429	Loop Close Blocked - Underfrequency Off	EVT[MCU]	Normal	Loop Restoration Close Not Blocked By Underfrequency.
191E	6430	HLT Removed	LRM[MCU]	Normal	
1F00	7936	Prohibit Rest. Xmit Status Active	RTL[MCU]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
1F01	7937	Enable Rest. Xmit Status Active	RTL[MCU]	Normal	

					Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
1F02	7938	Prohibit Rest. Xmit Status Clear	RTL[MCU]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
1F03	7939	Enable Rest. Xmit Status Clear	RTL[MCU]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
1F04	7940	Error Registering Team Peer	RTL[MCU]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
1F05	7941	P2P message response	RTL[MCU]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
1F06	7942	Clr PR Status Control Pt Rcvd	RTL[MCU]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
1F07	7943	Clr Rest. Enab Stat Ctrl Pt Rcvd	RTL[MCU]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
1F08	7944	Prohibit Rest. Sent to Remote Dev	RTL[MCU]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
1F09	7945	Transfer Trip Sent to Remote Dev	RTL[MCU]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
1F0A	7946	Error sending P.R. to Rmt Dev	RTL[MCU]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort

1F0B	7947	Error sending Xfer Trip to Rmt Dev	RTL[MCU]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
1F0C	7948	Transfer Trip Enabled	RTL[MCU]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
1F0D	7949	Transfer Trip Disabled	RTL[MCU]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
1F0E	7950	Clearing Prohib Rest Blocked	DAT[MCU]	All	Clearing Prohibit Rest. Blocked Data 1:Debug Data Data1 Type: ushort Data 2:Debug Data Data2 Type: ushort Data 3:Debug Data Data3 Type: ushort Data 4:Debug Data Data4 Type: ClearPRBlocker
1F0F	7951	DNP3 Response received	RTL[MCU]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
1F10	7952	P.R. sent from local conditions	RTL[MCU]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
1F11	7953	Enable Restoration sent to RTU	RTL[MCU]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
1F12	7954	RMT Xmit PR Enabd Local Conditions	RTL[MCU]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
1F13	7955	RMT Xmit PR Disabd Local Conditions	RTL[MCU]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
1F14	7956	RMT Xmit PR Enabd for SCADA	RTL[MCU]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort

					Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
1F15	7957	RMT Xmit PR Disabd for SCADA	RTL[MCU]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
1F16	7958	Clear PR on HLT removal disabled	RTL[MCU]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
2001	8193	SUP: Firmware Update Commit	SUP[MCU]	Normal	Firmware Update Commit.
2002	8194	SUP: Firmware Update Complete	SUP[MCU]	Normal	Firmware Update Complete.
2003	8195	SUP: No Manifest File	SUP[MCU]	Normal	No Manifest File.
2004	8196	SUP: Missing Firmware - Image	SUP[MCU]	Normal	Missing Firmware - Image. Data 1: Data1 Type: SUPFwuImage
2005	8197	SUP: Missing Firmware - Version	SUP[MCU]	Normal	Missing Firmware - Version. Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
2006	8198	SUP: Invalid Runtime Version - Image	SUP[MCU]	Normal	Invalid Runtime Version - Image. Data 1: Data1 Type: SUPFwuImage
2007	8199	SUP: Invalid Version - Runtime Version	SUP[MCU]	Normal	Invalid Runtime Version - Runtime Version. Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
2008	8200	SUP: Invalid Version - Manifiest Version	SUP[MCU]	Normal	Invalid Runtime Version - Manifiest Version. Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
200A	8202	DSP and/or M3 watchdog t.o. detected	SUP[MCU]	Normal	Invalid Runtime Version - Manifiest Version. Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
200B	8203	SUP: General Error	SUP[MCU]	Normal	Data 1: Data1 Type: SUPGeneralErrorCode
200C	8204	SUP: Started	SUP[MCU]	Normal	Data 1: Data1 Type: SUPStartReason

2101	8449	Subsystem Fatal Error	ECM[MCU]	Normal	Data 1: Data1 Type: ECMFatalError
2102	8450	IPC Ack Timeout	ECM[MCU]	Normal	
2103	8451	IPC Message Id Unknown	ECM[MCU]	Normal	
2104	8452	WiFi State Change Error	ECM[MCU]	Normal	
2105	8453	Pairing Device Status Change	ECM[MCU]	Normal	Data 1: Data1 Type: PDChangeStatus
2106	8454	Data Storage Error	ECM[MCU]	Normal	
2107	8455	Data Retrieval Error	ECM[MCU]	Normal	
2108	8456	Ethernet Config Error	ECM[MCU]	Normal	
2201	8705	GOOSE Subscription	GOS[MCU]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: EvtBoolean
2202	8706	GOOSE Publication	GOS[MCU]	Normal	Data 1: Data1 Type: ushort
2203	8707	GOOSE Communication Loss	GOS[MCU]	Normal	Data 1: Data1 Type: Hexushort Data 2: Data2 Type: ushort Data 3: Data3 Type: GooseCommLossReason
2204	8708	GOOSE Communication Restored	GOS[MCU]	Normal	Data 1: Data1 Type: Hexushort Data 2: Data2 Type: ushort
2205	8709	TCC Shift	GOS[MCU]	Normal	Data 1: Data1 Type: Hexushort
2206	8710	GOOSE Direct Transfer Trip	GOS[MCU]	Normal	Data 1: Data1 Type: Hexushort
2207	8711	GOOSE Config is Invalid	GOS[MCU]	Normal	Data 1: Data1 Type: GooseConfigFile Data 2: Data2 Type: GooseConfigInvalid
2211	8721	GOOSE Feature Enabled	GOS[MCU]	Normal	Data 1: Data1 Type: GooseDeactivationSource
2212	8722	GOOSE Feature Disabled	GOS[MCU]	Normal	Data 1: Data1 Type: GooseDeactivationSource
2213	8723	GOOSE Comms Loss Cleared	GOS[MCU]	Normal	
2214	8724	GOOSE Test Mode Enable Status	GOS[MCU]	Normal	Data 1: Data1 Type: SpecExtWFCCommandArg
2215	8725	GOOSE Comms Loss Active	GOS[MCU]	Normal	
2216	8726	GOOSE DPR Error	GOS[MCU]	Normal	

					Data 1: Data1 Type: DPRError Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort
2217	8727	GOOSE Communication Loss Notify Timer Error	GOS[MCU]	Normal	Data 1: Data1 Type: ushort
2301	8961	PMU Performance Class Enabled	PMU[MCU]	Normal	Data 1: Data1 Type: PMUClass Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort
2302	8962	PMU Performance Class Disabled	PMU[MCU]	Normal	Data 1: Data1 Type: PMUClass Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort
2303	8963	PMU Data Transmission Enabled	PMU[MCU]	Normal	Data 1: Data1 Type: PMUClass Data 2: **IP addr first half** Data2 Type: Hexushort Data 3: **IP addr second half** Data3 Type: Hexushort Data 4: **Port Number** Data4 Type: Hexushort
2304	8964	PMU Data Transmission Disabled	PMU[MCU]	Normal	Data 1: Data1 Type: PMUClass Data 2: **IP addr first half** Data2 Type: Hexushort Data 3:IP addr second half Data3 Type: Hexushort Data 4: **Port Number** Data4 Type: Hexushort
2305	8965	PMU Data Concentrator Cmd Rcvd	PMU[MCU]	Normal	Data 1: Data1 Type: PMUDataConcentratorCmd Data 2: Data2 Type: PMUErrorCode Data 3: Data3 Type: ushort Data 4: Data4 Type: Hexushort
2306	8966	PMU Not Ready	PMU[MCU]	Normal	Data 1: Data1 Type: PMUNotReady Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort
2307	8967	PMU Ready	PMU[MCU]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort
7218	29208	NETX make runner source	NET[MCU]	Normal	Data 1: **Size of runner in RTU addresses** Data1 Type: RTUAddress Data 2: **Runner RTU lists** Data2 Type: RTUlists Data 3: **Runner node lists** Data3 Type: Nodelists Data 4:Null Data4 Type: ushort
7219	29209	NETX make runner RTUs	NET[MCU]	Normal	Data 1: **Size of runner in RTU addresses** Data1 Type: RTUAddress Data 2: **Runner RTU lists** Data2 Type: RTUlists Data 3: **Runner node lists** Data3 Type: Nodelists Data 4:Null Data4 Type: ushort

721A	29210	NETX make runner destination	NET[MCU]	Normal	Data 1: **Size of runner in RTU addresses** Data1 Type: RTUAddress Data 2: **Runner RTU lists** Data2 Type: RTUlists Data 3: **Runner node lists** Data3 Type: Nodelists Data 4:Null Data4 Type: ushort
721B	29211	NETX begin sendind activation runners	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
721C	29212	NETX activation object runner sent	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2: **RTU Address** Data2 Type: RTUAddress Data 3: **Data Length** Data3 Type: DataLength Data 4:Null Data4 Type: ushort
721D	29213	NETX forward activate runners	NET[MCU]	Normal	Data 1: **Runner Number** Data1 Type: RunnerNumber Data 2: **Runner Index Number** Data2 Type: RunnerIndex Data 3: **Type of netlist distrubution[RunnerIndex]** Data3 Type: ushort Data 4:Null Data4 Type: ushort
721E	29214	NETX forward activation runner index	NET[MCU]	Normal	Data 1: **Runner Index Number** Data1 Type: RunnerIndex Data 2: **Null** Data2 Type: ushort Data 3: **Null** Data3 Type: ushort Data 4: **Null** Data4 Type: ushort
721F	29215	NETX forward activation runner source	NET[MCU]	Normal	Data 1: **RTU Address** Data1 Type: RTUAddress Data 2: **Source Net Node ID** Data2 Type: SrcNodeID Data 3: **Destination Net Node ID** Data3 Type: DestNodeID Data 4:Null Data4 Type: ushort
7220	29216	NETX forward activation runner sent ok	NET[MCU]	Normal	NETX forwarding activation runner sent ok Data 1: **Runner Index Number** Data1 Type: RunnerIndex Data 2: **RTU Address** Data2 Type: RTUAddress Data 3: **Data Length** Data3 Type: DataLength Data 4:Null Data4 Type: ushort
7221	29217	NETX Feeder Net is activated	NET[MCU]	Normal	Data 1: **Our position in the Node Index Table** Data1 Type: NodeIndex Data 2: **Feeder Net Ids in the array** Data2 Type: FeederNetID Data 3: **Runner Index** Data3 Type: RunnerIndex Data 4:Null Data4 Type: ushort
7222	29218	NETX Feeder Net added to division list	NET[MCU]	Normal	Data 1: **VM table Index** Data1 Type: VMIndex Data 2: **Feeder Net Ids in the array** Data2 Type: FeederNetID Data 3: **Feeder Net CRCs** Data3 Type: FeederNetCRC Data 4:Null Data4 Type: ushort
7223	29219	NETX accept activation runner	NET[MCU]	Normal	

					Data 1: **Runner Number** Data1 Type: RunnerNumber Data 2: **Runner index** Data2 Type: RunnerIndex Data 3: **Type of netlist distribution** Data3 Type: FeederNetObjType Data 4: **Null** Data4 Type: ushort
7224	29220	NETX accept activation runner failed	NET[MCU]	Normal	Data 1: **Runner Number** Data1 Type: RunnerNumber Data 2: **Identify Actual Runner** Data2 Type: RunnerNumber Data 3: **Null** Data3 Type: ushort Data 4: **Null** Data4 Type: ushort
7225	29221	NETX accept activation runner result	NET[MCU]	Normal	Data 1: **Runner Number** Data1 Type: RunnerNumber Data 2: **Identify Actual Runner** Data2 Type: RunnerNumber Data 3: **Null** Data3 Type: ushort Data 4: **Null** Data4 Type: ushort
7226	29222	NETX Make Nodes start	NET[MCU]	Normal	Data 1: **Runner Number** Data1 Type: FeederNetID Data 2: **Local RTU Address** Data2 Type: RTUAddress Data 3: **Number of associated payload elements** Data3 Type: NumPayLoad Data 4:Null Data4 Type: ushort
7227	29223	NETX Make Nodes compelete	NET[MCU]	Normal	Data 1: **Number of associated payload elements** Data1 Type: NumPayLoad Data 2: **Number of Node IDs in the list** Data2 Type: NumNodeID Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
7228	29224	NETX add nodes start	NET[MCU]	Normal	Data 1: **Null** Data1 Type: ushort Data 2: **Team Member Number** Data2 Type: TeamRecord Data 3: **Feeder Net CRC** Data3 Type: FeederNetCRC Data 4: **Null** Data4 Type: ushort
7229	29225	NETX add node id	NET[MCU]	Normal	Data 1: **Node ID** Data1 Type: SrcNodeID Data 2: **Switch** Data2 Type: SWnum Data 3: **Side information related to the switch** Data3 Type: SideInfo Data 4: **Null** Data4 Type: ushort
722A	29226	NETX add a new node	NET[MCU]	Normal	Data 1: **Feeder Net ID** Data1 Type: FeederNetID Data 2: **Number of Node Index entries in the Node Table** Data2 Type: NumNodeIndex Data 3: **Number of Node IDs in list** Data3 Type: NumNodeID Data 4:Null Data4 Type: ushort
722B	29227	NETX report adjacent NetList start	NET[MCU]	Normal	Data 1: **Left Node Index** Data1 Type: NodeIndex Data 2:Null Data2 Type: ushort Data 3: **Feeder Net CRC of the left** Data3 Type: FeederNetCRC Data 4:Null Data4 Type: ushort
722C	29228	NETX report adjacent to runner	NET[MCU]	Normal	

		side1			Data 1: **Tie delievers an adjacent NL to a Runner Source for delivery** Data1 Type: RunnerType Data 2: **Destination Feeder Net ID** Data2 Type: FeederNetID Data 3: **Destination Feeder Net CRC** Data3 Type: FeederNetCRC Data 4:Null Data4 Type: ushort
722D	29229	NETX report adj netlist obj send to s1	NET[MCU]	Normal	NETX report adjacent netlist object send to side1 Data 1: **Number of teams** Data1 Type: NumOfTeams Data 2: **Destination RTU Address** Data2 Type: RTUAddress Data 3: **Length of Feeder Net description method** Data3 Type: dctsiz Data 4:Null Data4 Type: ushort
722E	29230	NETX Adj fdrnet netlist propagation done	NET[MCU]	Normal	NETX Adj feedernet netlist propagation done Data 1: **Adjacent FeederNet's CRC** Data1 Type: Hexushort Data 2: **Returned netlist runners of the adj feedernet** Data2 Type: NumRunners Data 3: **Netlist runners in the adj feedernet** Data3 Type: NumRunners Data 4: **Sent netlist runners of adj feedernet** Data4 Type: NumRunners
7230	29232	NETX send adj Feeder Net Runner's qty	NET[MCU]	Normal	NETX send adjacent Feeder Net Runner's qty Data 1: **This is the runner's source device** Data1 Type: DeviceNumber Data 2: **Runner Source row number in nnet** Data2 Type: NetViewRowNum Data 3: **Number of runners** Data3 Type: NumRunners Data 4:Null Data4 Type: ushort
7231	29233	NETX send adj FdrNet runner's FdrNet ID	NET[MCU]	Normal	NETX send adjacent Feeder Net runner's feedernetID Data 1: **Runner Index** Data1 Type: RunnerIndex Data 2: **Feeder Net ID** Data2 Type: FeederNetID Data 3: **Feeder Net CRC** Data3 Type: FeederNetCRC Data 4:Null Data4 Type: ushort
7232	29234	NETX send adj Feeder Net runner's type	NET[MCU]	Normal	NETX send adjacent Feeder Net runner's type Data 1: **Runner Type** Data1 Type: RunnerType Data 2: **Feeder Net ID** Data2 Type: FeederNetID Data 3: **Feeder Net CRC** Data3 Type: FeederNetCRC Data 4:Null Data4 Type: ushort
7233	29235	NETX send adj FNet runner's adj FNet ID	NET[MCU]	Normal	NETX send adjacent Feeder Net runnner's adj FeederNetID Data 1: **Adjecent Feeder Net ID** Data1 Type: FeederNetID Data 2: **Adjecent Feeder Net CRC** Data2 Type: FeederNetCRC Data 3: **Number of teams** Data3 Type: NumOfTeams Data 4:Null Data4 Type: ushort
7234	29236	NETX send adj Feeder Net runner's rtu	NET[MCU]	Normal	NETX send adjacent Feeder Net runner's rtu Data 1: **Runner Number** Data1 Type: RunnerNumber Data 2: **RTU Address** Data2 Type: RTUAddress Data 3: **Length of Feeder Net description method** Data3 Type: dctsiz Data 4: **Null** Data4 Type: ushort
7235	29237	NETX request netlist ok	NET[MCU]	Normal	 Data 1: **Runner Number** Data1 Type: RunnerNumber Data 2: **Net destination RTU Address** Data2 Type: RTUAddress Data 3: **Length of Feeder Net description method** Data3 Type:

					dctsiz Data 4: **Null** Data4 Type: ushort
7236	29238	NETX reply Feeder Net req: crc is bad	NET[MCU]	Normal	NETX reply Feeder Net request, crc is bad Data 1: **Feeder Net ID** Data1 Type: FeederNetID Data 2: **Feeder Net CRC** Data2 Type: FeederNetCRC Data 3: **Feeder Net CRC** Data3 Type: FeederNetCRC Data 4:Null Data4 Type: ushort
7237	29239	NETX reply request sent ok	NET[MCU]	Normal	Data 1: **Feeder Net ID** Data1 Type: FeederNetID Data 2: **Destination RTU address** Data2 Type: RTUAddress Data 3: **Data Length** Data3 Type: DataLength Data 4:Null Data4 Type: ushort
7238	29240	NETX reply Feeder Net request not found	NET[MCU]	Normal	Data 1: **Feeder Net ID** Data1 Type: FeederNetID Data 2: **Feeder Net CRC** Data2 Type: FeederNetCRC Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
7239	29241	NETX requested Feeder Net is a duplicate	NET[MCU]	Normal	Data 1: **Feeder Net ID** Data1 Type: FeederNetID Data 2: **Incoming Feeder Net ID** Data2 Type: FeederNetID Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
723A	29242	NETX requested Feeder Net good	NET[MCU]	Normal	Data 1: **Netx is out of memory** Data1 Type: ErrorCodeNETX Data 2: **NetxFindspace(incoming number of teams)** Data2 Type: NumOfTeams Data 3: **Incoming number of teams** Data3 Type: NumOfTeams Data 4:Null Data4 Type: ushort
723B	29243	NETX save requested Feeder Net ID	NET[MCU]	Normal	Data 1: **Incoming Feeder Net ID** Data1 Type: FeederNetID Data 2: **Incoming Feeder Net CRC** Data2 Type: FeederNetCRC Data 3: **Incoming number of teams** Data3 Type: NumOfTeams Data 4:Null Data4 Type: ushort
723C	29244	NETX reequested Feeder Net saved ok	NET[MCU]	Normal	Data 1: **Size of team array** Data1 Type: ushort Data 2: **Size of teamsp data** Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
723D	29245	NETX forward Feeder Net runner	NET[MCU]	Normal	Data 1: **Identify Actual Runner** Data1 Type: RunnerNumber Data 2: **Runner Index** Data2 Type: RunnerIndex Data 3: **Type of netlist distribution[RunnerIndex]** Data3 Type: FeederNetObjType Data 4:Null Data4 Type: ushort
723E	29246	NETX's forward runner's index	NET[MCU]	Normal	Data 1: **Incoming Runner's index** Data1 Type: RunnerIndex Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort

723F	29247	NETX forward Feeder Net destination rtu	NET[MCU]	Normal	Data 1: **RTU Address** Data1 Type: RTUAddress Data 2: **Source Node ID** Data2 Type: SrcNodeID Data 3: **Destination Node ID** Data3 Type: DestNodeID Data 4:Null Data4 Type: ushort
7240	29248	NETX forward Feeder Net rnr sent: OK	NET[MCU]	Normal	NETX forward FeederNet runner sent,ok Data 1: **Runner Index** Data1 Type: RunnerIndex Data 2: **RTU address** Data2 Type: RTUAddress Data 3: **Data Length** Data3 Type: DataLength Data 4:Null Data4 Type: ushort
7243	29251	NETX forward adjacent Feeder Net sent ok	NET[MCU]	Normal	Data 1: **Runner Number** Data1 Type: RunnerNumber Data 2: **Destination RTU Address** Data2 Type: RTUAddress Data 3: **Length of Feeder Net description method** Data3 Type: dctsiz Data 4:Null Data4 Type: ushort
7244	29252	NETX save adjacent Feeder Net runner cvd	NET[MCU]	Normal	Data 1: **Feeder Net ID** Data1 Type: FeederNetID Data 2: **Feeder Net CRC** Data2 Type: FeederNetCRC Data 3: **Number of teams** Data3 Type: NumOfTeams Data 4: **Null** Data4 Type: ushort
7245	29253	NETX save adjacent Feeder Net IDs	NET[MCU]	Normal	Data 1: **Adjecent Feeder Net ID** Data1 Type: FeederNetID Data 2: **Adjecent Feeder Net CRC** Data2 Type: FeederNetCRC Data 3: **Number of teams** Data3 Type: NumOfTeams Data 4:Null Data4 Type: ushort
7246	29254	NETX save adjacent Feeder Net node ID	NET[MCU]	Normal	Data 1: **Feeder Net Node ID** Data1 Type: SrcNodeID Data 2: **Node Index** Data2 Type: NodeIndex Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
7247	29255	NETX save adj FeederNet dup chk hit	NET[MCU]	Normal	NETX save adjacent Feeder Net duplicate check hit Data 1: **Feeder Net ID in the array** Data1 Type: FeederNetID Data 2: **Adjecent Feeder Net ID** Data2 Type: FeederNetID Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
7249	29257	NETX save adj Feeder Net number of teams	NET[MCU]	Normal	NETX save adjacent Feeder Net number of teams Data 1: **Adjecent Number of Teams** Data1 Type: NumOfTeams Data 2: **Starting Index in the array** Data2 Type: FeederNetIndex Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
724A	29258	NETX save adj FNet; our num of teams	NET[MCU]	Normal	NETX save adjacent Feeder Net, our num of teams Data 1: **Our number of teams** Data1 Type: NumOfTeams Data 2: **Starting Index in the array** Data2 Type: FeederNetIndex Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
724E	29262	NETX adjacent FNet added to division net	NET[MCU]	Normal	NETX adjacent Feeder Net added to division net Data 1: **VM table index for this Feeder Net ID** Data1 Type: VMIndex

					Data 2: **Feeder Net ID** Data2 Type: FeederNetID Data 3: **Feeder Net CRC** Data3 Type: FeederNetCRC Data 4:Null Data4 Type: ushort
724F	29263	NETX save adjacent Feeder Net conflict	NET[MCU]	Normal	Data 1: **Feeder Net ID in the array** Data1 Type: FeederNetID Data 2: **Adjecent Feeder Net ID** Data2 Type: FeederNetID Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
7250	29264	NETX save adj FeederNet node indx failed	NET[MCU]	Normal	NETX save adjacent Feeder Net node index failed Data 1: **Node Index** Data1 Type: NodeIndex Data 2: **Feeder Net ID** Data2 Type: FeederNetID Data 3: **Feeder Net CRC** Data3 Type: FeederNetCRC Data 4:Null Data4 Type: ushort
7251	29265	NETX save Feeder Net runner recieved	NET[MCU]	Normal	Data 1: **Feeder Net ID** Data1 Type: FeederNetID Data 2: **Feeder Net CRC** Data2 Type: FeederNetCRC Data 3: **Number of teams** Data3 Type: NumOfTeams Data 4:Null Data4 Type: ushort
7252	29266	NETX save Feeder Net runner's nodeindex	NET[MCU]	Normal	Data 1: **Incoming Feeder Net ID** Data1 Type: FeederNetID Data 2: **Incoming Feeder Net CRC** Data2 Type: FeederNetCRC Data 3: **Node Index** Data3 Type: NodeIndex Data 4:Null Data4 Type: ushort
7253	29267	NETX save Feeder Net's dup replaced	NET[MCU]	Normal	NETX save Feeder Net's duplicate replaced Data 1: **Feeder Net ID in the array** Data1 Type: FeederNetID Data 2: **Incoming Feeder Net ID** Data2 Type: FeederNetID Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
7254	29268	NETX save Feeder Net's present status	NET[MCU]	Normal	Data 1: **Feeder Net ID in the array** Data1 Type: FeederNetID Data 2: **Incoming Feeder Net ID** Data2 Type: FeederNetID Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
725A	29274	NETX save Feeder Net runner success	NET[MCU]	Normal	Data 1: **Node Index** Data1 Type: NodeIndex Data 2: **Left Node/Right Node Index** Data2 Type: NodeIndex Data 3: **Incoming Feeder Net ID** Data3 Type: FeederNetID Data 4:Null Data4 Type: ushort
725B	29275	NETX save Feeder Net's both sides check	NET[MCU]	Normal	Data 1: **Incoming Node ID** Data1 Type: SrcNodeID Data 2: **Team Member Count** Data2 Type: ushort Data 3: **Node Index** Data3 Type: NodeIndex Data 4:Null Data4 Type: ushort
725C	29276	NETX save Feeder Net to our side	NET[MCU]	Normal	Data 1: **FeederNetID[NodeIndex]** Data1 Type: FeederNetID Data 2: **FeederNetID[otherIndex]** Data2 Type: FeederNetID Data 3: **Node Index** Data3 Type: NodeIndex Data 4:Null Data4 Type: ushort
725D	29277	NETX saved Feeder Net added to the	NET[MCU]	Normal	

		index			Data 1: **Node Index** Data1 Type: NodeIndex Data 2: **Incoming Feeder Net ID** Data2 Type: FeederNetID Data 3: **Incoming Feeder Net CRC** Data3 Type: FeederNetCRC Data 4:Null Data4 Type: ushort
725F	29279	NETX saved FNet's nodeindx has failed	NET[MCU]	Normal	NETX saved Feeder Net's node index has failed Data 1: **Node Index** Data1 Type: NodeIndex Data 2: **Feeder Net ID** Data2 Type: FeederNetID Data 3: **Feeder Net CRC** Data3 Type: FeederNetCRC Data 4: **Null** Data4 Type: ushort
7261	29281	NETX accept the Feeder Net runner	NET[MCU]	Normal	Data 1: **Runner Number** Data1 Type: RunnerNumber Data 2: **Identify actual runner** Data2 Type: RunnerNumber Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
7263	29283	NETX register DNP Address List Size	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
7264	29284	NETX communication check runner sent ok	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2: **RTU Address** Data2 Type: RTUAddress Data 3: **Size of received runner in Bytes** Data3 Type: RunnerSize Data 4:Null Data4 Type: ushort
7265	29285	NETX get communication chk runner number	NET[MCU]	Normal	NETX get communication check runner number Data 1: **Runner Number** Data1 Type: RunnerNumber Data 2:Null Data2 Type: ushort Data 3: **Number of associated payload elements** Data3 Type: NumPayLoad Data 4:Null Data4 Type: ushort
7266	29286	NETX comm chk rnr's size is mismatched	NET[MCU]	Normal	NETX communication check runner's size is mismatched Data 1: **Runner Number** Data1 Type: RunnerNumber Data 2: **Object Length** Data2 Type: DataLength Data 3: **Size of recieved runner in Bytes** Data3 Type: RunnerSize Data 4:Null Data4 Type: ushort
7267	29287	NETX get communication chk runner index	NET[MCU]	Normal	NETX get communication check runner index Data 1: **Size of recieved runner in Bytes** Data1 Type: RunnerSize Data 2:Null Data2 Type: ushort Data 3: **Runner Index** Data3 Type: RunnerIndex Data 4:Null Data4 Type: ushort
7268	29288	NETX get communication chk rnr's rtu add	NET[MCU]	Normal	NETX get communication check runner's rtu address Data 1: **RTU Address** Data1 Type: RTUAddress Data 2: **Our local RTU Address** Data2 Type: RTUAddress Data 3: **Runner Index** Data3 Type: RunnerIndex Data 4:Null Data4 Type: ushort
7269	29289	NETX get comm chk rnr's dest rtu	NET[MCU]	Normal	NETX get communication check runner's destination rtu Data 1: **RTU Address** Data1 Type: RTUAddress Data 2: **Our local RTU Address** Data2 Type: RTUAddress Data 3: **Runner Index** Data3 Type: RunnerIndex Data 4:Null Data4 Type: ushort

726A	29290	NETX get comm chkrnr rnr internal node	NET[MCU]	Normal	NETX get communication checkrunner runner internal nodes Data 1: **RTU Address** Data1 Type: RTUAddress Data 2: **Runner Index** Data2 Type: RunnerIndex Data 3: **Node Count** Data3 Type: NodeCount Data 4:Null Data4 Type: ushort
726C	29292	NETX get comm chk runner rtu address	NET[MCU]	Normal	NETX get communication check runner rtu address Data 1: **RTU Address** Data1 Type: RTUAddress Data 2: **Our local RTU Address** Data2 Type: RTUAddress Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
726D	29293	NETX get comm chk rnr indx fault	NET[MCU]	Normal	NETX get communication check runner index fault Data 1: **Size of the recived runner in Bytes** Data1 Type: RunnerSize Data 2:Null Data2 Type: ushort Data 3: **Runner Index** Data3 Type: RunnerIndex Data 4:Null Data4 Type: ushort
726E	29294	NETX begin forwarding comm chk rnr	NET[MCU]	Normal	NETX begin forwarding communication check runner Data 1: **Identify Actual Runner Number** Data1 Type: RunnerNumber Data 2:Null Data2 Type: ushort Data 3: **Size of runner in RTU addresses** Data3 Type: RTUAddress Data 4:Null Data4 Type: ushort
726F	29295	NETX forwarding comm check rnr sent ok	NET[MCU]	Normal	NETX forwarding communication check runner sent ok Data 1:Null Data1 Type: ushort Data 2: **RTU Address** Data2 Type: RTUAddress Data 3: **Size of recived runner in Bytes** Data3 Type: RunnerSize Data 4:Null Data4 Type: ushort
7270	29296	NETX accept communication check runner	NET[MCU]	Normal	Data 1: **Runner Number** Data1 Type: RunnerNumber Data 2:Null Data2 Type: ushort Data 3: **Size of runner in RTU Addresses** Data3 Type: RTUAddress Data 4:Null Data4 Type: ushort
7271	29297	NETX comm chk rnr size is mismatched	NET[MCU]	Normal	NETX communication check runner size is mismatched Data 1: **Runner Number** Data1 Type: RunnerNumber Data 2: **Data Length** Data2 Type: DataLength Data 3: **Size of recieved runner in Bytes** Data3 Type: RunnerSize Data 4:Null Data4 Type: ushort
7272	29298	NETX communication check runner's index	NET[MCU]	Normal	Data 1: **Size of recieved runner in Bytes** Data1 Type: RunnerSize Data 2:Null Data2 Type: ushort Data 3: **Null** Data3 Type: RunnerIndex Data 4:Null Data4 Type: ushort
7273	29299	NETX get comm check runner's data	NET[MCU]	Normal	NETX get communication check runner's data Data 1: **Runner Number** Data1 Type: RunnerNumber Data 2: **Object Length** Data2 Type: DataLength Data 3: **Size of runner in RTU Addresses** Data3 Type: RTUAddress Data 4:Null Data4 Type: ushort

7274	29300	NETX done accepting comm check runners	NET[MCU]	Normal	NETX done accepting communication check runners Data 1: **Claimed in dispatch** Data1 Type: EntryPointDevice Data 2: **RTU Address** Data2 Type: RTUAddress Data 3: **Actual runner number from header** Data3 Type: RunnerNumber Data 4:Null Data4 Type: ushort
7275	29301	NETX make table of runner number	NET[MCU]	Normal	Data 1: **Runner Number** Data1 Type: RunnerNumber Data 2: **Feeder Net ID** Data2 Type: FeederNetID Data 3: **Feeder Net CRC** Data3 Type: FeederNetCRC Data 4:Null Data4 Type: ushort
7276	29302	NETX make runner table count	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3: **Runner Index** Data3 Type: RunnerIndex Data 4:Null Data4 Type: ushort
7277	29303	NETX acpt data collection rnr bad count	NET[MCU]	Normal	NETX accept data collection runner bad count Data 1: **Net Destination Node ID** Data1 Type: DestNodeID Data 2: **Runner Number** Data2 Type: RunnerNumber Data 3: **Runner's quantity** Data3 Type: RunnerQuantity Data 4:Null Data4 Type: ushort
7278	29304	NETX data delivery rnr node index failed	NET[MCU]	Normal	NETX data delivery Runner node index failed Data 1: **Node ID** Data1 Type: SrcNodeID Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
7279	29305	NETX data runner information	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
727A	29306	NETX data runner source rtu	NET[MCU]	Normal	Data 1: **The Normal State NetView length** Data1 Type: NETViewLength Data 2: **The local device number of the FN runner source device** Data2 Type: DeviceIndex Data 3: **RTU Address** Data3 Type: RTUAddress Data 4:Null Data4 Type: ushort
727B	29307	NETX data runner selection	NET[MCU]	Normal	Data 1: **Feeder Net ID** Data1 Type: FeederNetID Data 2: **Nnet row number** Data2 Type: NetViewRowNum Data 3: **The local device number of the FN runner source device** Data3 Type: DeviceIndex Data 4:Null Data4 Type: ushort
727C	29308	NETX peer is registered already	NET[MCU]	Normal	Data 1: **RTU Address** Data1 Type: RTUAddress Data 2:Null Data2 Type: ushort Data 3: **Registration Status** Data3 Type: RegistrationStatus Data 4:Null Data4 Type: ushort

727D	29309	NETX peer is deregistered; reregistering	NET[MCU]	Normal	NETX peer is deregistered, re-registering Data 1: **RTU Address** Data1 Type: RTUAddress Data 2:Null Data2 Type: ushort Data 3: **Registration Status** Data3 Type: RegistrationStatus Data 4:Null Data4 Type: ushort
727E	29310	NETX dest device node indx failure	NET[MCU]	Normal	NETX destination device node index failure Data 1: **Find this node in the NLTA arrays** Data1 Type: IndexMngTable Data 2: **VM table Index** Data2 Type: VMIndex Data 3: **Index into the substation list for Feeder Net "tree root">** Data3 Type: Substation Data 4:Null Data4 Type: ushort
7288	29320	NETX dispatch designer Feeder Net object	NET[MCU]	Normal	Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Destination RTU Address** Data2 Type: RTUAddress Data 3: **Destination Node ID** Data3 Type: DestNodeID Data 4:Null Data4 Type: ushort
7289	29321	NETX dispatch FeederNet source and dest	NET[MCU]	Normal	NETX dispatch Feeder Net source and destination Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Destination RTU Address** Data2 Type: RTUAddress Data 3: **Destination Node ID** Data3 Type: DestNodeID Data 4:Null Data4 Type: ushort
728A	29322	NETX dispatch Feeder Net dest Node ID	NET[MCU]	Normal	NETX dispatch Feeder Net destination Node ID Data 1: **Runner Number** Data1 Type: RunnerNumber Data 2: **Incoming Feeder Net ID** Data2 Type: FeederNetID Data 3: **Incoming Feeder Net CRC** Data3 Type: FeederNetCRC Data 4:Null Data4 Type: ushort
728B	29323	NETX dispatch Feeder Net delivery index	NET[MCU]	Normal	Data 1: **Incoming Feeder Net ID** Data1 Type: FeederNetID Data 2: **Incoming Feeder Net CRC** Data2 Type: FeederNetCRC Data 3: **Runner Index** Data3 Type: RunnerIndex Data 4:Null Data4 Type: ushort
728C	29324	NETX dispatch Feeder Net delivery save	NET[MCU]	Normal	Data 1: **Destination Index** Data1 Type: DestinationIndex Data 2: **Runner Number** Data2 Type: RunnerNumber Data 3: **Size of runner in RTU Addresses** Data3 Type: RTUAddress Data 4:Null Data4 Type: ushort
728E	29326	NETX dispatch comm chk source and dest	NET[MCU]	Normal	NETX dispatch communication check source and destination Data 1: **Source RTU Adress** Data1 Type: RTUAddress Data 2: **Destination RTU Address** Data2 Type: RTUAddress Data 3: **Destination Node ID** Data3 Type: DestNodeID Data 4:Null Data4 Type: ushort
728F	29327	NETX dispatch comm check FeederNet ID	NET[MCU]	Normal	NETX dispatch communication check Feeder Net ID Data 1: **Clamied in Dispatch** Data1 Type: EntryPointDevice Data 2: **Destination Index** Data2 Type: DestinationIndex Data 3: **Number of associated payload elements** Data3 Type: NumPayLoad Data 4:Null Data4 Type: ushort

7295	29333	NETX dispatch comm check sent to	NET[MCU]	Normal	NETX dispatch communication check sent to Data 1: **Runner Number** Data1 Type: RunnerNumber Data 2: **Feeder Net ID** Data2 Type: FeederNetID Data 3: **Feeder Net CRC** Data3 Type: FeederNetCRC Data 4:Null Data4 Type: ushort
7296	29334	NETX dispatch comm check handled	NET[MCU]	Normal	NETX dispatch communication check handled Data 1: **Runner Index** Data1 Type: RunnerIndex Data 2: **Null** Data2 Type: ushort Data 3: **Null** Data3 Type: ushort Data 4: **Null** Data4 Type: ushort
7297	29335	NETX dispatch netlist rqst src and dest	NET[MCU]	Normal	NETX dispatch netlist request source and destination Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Destination RTU Address** Data2 Type: RTUAddress Data 3: **Destination Node ID** Data3 Type: DestNodeID Data 4:Null Data4 Type: ushort
7298	29336	NETX dispatch netlist request FNet ID	NET[MCU]	Normal	NETX dispatch netlist request Feeder Net ID Data 1: **Destination RTU Address** Data1 Type: RTUAddress Data 2: **FeederNetID** Data2 Type: FeederNetID Data 3: **FeederNetCRC** Data3 Type: FeederNetCRC Data 4:Null Data4 Type: ushort
729A	29338	NETX dispatch primary rqst netlist resp	NET[MCU]	Normal	NETX dispatch primary request netlist response Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Destination RTU Address** Data2 Type: RTUAddress Data 3: **Destination Node ID** Data3 Type: DestNodeID Data 4:Null Data4 Type: ushort
729B	29339	NETX dispatch prim netlist src and dest	NET[MCU]	Normal	NETX dispatch primary netlist source and destination Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Destination RTU Address** Data2 Type: RTUAddress Data 3: **Destination Node ID** Data3 Type: DestNodeID Data 4:Null Data4 Type: ushort
729C	29340	NETX dispatch primary netlist source ID	NET[MCU]	Normal	 Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Data Length** Data2 Type: DataLength Data 3: **Net source Node ID** Data3 Type: SrcNodeID Data 4:Null Data4 Type: ushort
729D	29341	NETX dispatch primary netlist indx found	NET[MCU]	Normal	NETX dispatch primary netlist index found Data 1: **Feeder Net ID** Data1 Type: FeederNetID Data 2: **Feeder Net CRC** Data2 Type: FeederNetCRC Data 3: **Runner Index** Data3 Type: RunnerIndex Data 4:Null Data4 Type: ushort
729E	29342	NETX dispatch primary netlist indx nums	NET[MCU]	Normal	NETX dispatch primary netlist indexed numbers Data 1: **Destination Index** Data1 Type: DestinationIndex Data 2: **Runner Number** Data2 Type: RunnerNumber Data 3: **Size of runner in RTU Addresses** Data3 Type: RTUAddress Data 4:Null Data4 Type: ushort
72A0	29344	NETX dispatch newadj delivery rnr src ST	NET[MCU]	Normal	NETX dispatch new adjacent delivery runner source ST Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Destination RTU Address** Data2 Type: RTUAddress

					Data 3: **Net Destination Node ID** Data3 Type: DestNodeID Data 4:Null Data4 Type: ushort
72A1	29345	NETX dispatch new adj delivery rnr done	NET[MCU]	Normal	NETX dispatch new adjacent delivery runner done Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
72A4	29348	NETX dispatch adj netlist reporter src	NET[MCU]	Normal	NETX dispatch adjacent netlist reporter source Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Destination RTU Address** Data2 Type: RTUAddress Data 3: **Net destination Node ID** Data3 Type: DestNodeID Data 4:Null Data4 Type: ushort
72A5	29349	NETX dispatch adj netlist report sending	NET[MCU]	Normal	NETX dispatch adjacent netlist reporter sending Data 1: **Runner Number** Data1 Type: RunnerNumber Data 2: **Number of actual data elments in DLV** Data2 Type: NumDataElements Data 3: **Net destination Node ID** Data3 Type: DestNodeID Data 4:Null Data4 Type: ushort
72A8	29352	NETX dispat act Netlist rep fail to frwd	NET[MCU]	Normal	NETX dispatch Active Netlist reporter failed to forward Data 1: **Source RTU Address** Data1 Type: RTUAddress Data 2: **Destination RTU Address** Data2 Type: RTUAddress Data 3: **Net destination Node ID** Data3 Type: DestNodeID Data 4:Null Data4 Type: ushort
72AA	29354	NETX state machine A state 01 arrival	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2: **Waiting for IT Designer** Data2 Type: StatusFeedbackArea Data 3: **Null** Data3 Type: StatusFeedbackArea Data 4:Null Data4 Type: ushort
72AB	29355	NETX state machA state 01 depart FNet ID	NET[MCU]	Normal	NETX state machine A state 01 depart Feeder Net ID Data 1: **Incoming Feeder Net ID from IntelliTeam Designer** Data1 Type: FeederNetID Data 2: **Incoming new Feeder Net CRC from IntelliTeam Designer** Data2 Type: FeederNetCRC Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
72AC	29356	NETX state machA state01 num of teams	NET[MCU]	Normal	NETX state machine A state 01 number of teams Data 1: **Feeder Net incoming team array number of teams** Data1 Type: INCNUMTEAM Data 2: **Number of Device-Wire pairs from prep function** Data2 Type: DeviceWirepairs Data 3: **Number of Incoming Feeder Net Flags from ITD** Data3 Type: FeederNetObjectFlags Data 4:Null Data4 Type: ushort
72AD	29357	NETX state machine A state 02 arrival	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2: **Perform NETview Express analysis** Data2 Type: StatusFeedbackArea Data 3: **Waiting for IT Designer** Data3 Type: StatusFeedbackArea Data 4:Null Data4 Type: ushort
72AE	29358	NETX statemachA state02 arriv net stat	NET[MCU]	Normal	NETX state machine A state 02 arrival net status

					Data 1: **Number of devices in the Feeder Net** Data1 Type: NumDevicesinFN Data 2: **Number if entries in row,one for device,one for wire** Data2 Type: ExpressNetViewRow Data 3: **Number of paths in this Feeder Net** Data3 Type: NumPaths Data 4:Null Data4 Type: ushort
72AF	29359	NETX state machine A state 03 arrival	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2: **Create comm check runners and launch, then wait for return** Data2 Type: StatusFeedbackArea Data 3: **Perform NETview Express analysis** Data3 Type: StatusFeedbackArea Data 4:Null Data4 Type: ushort
72B0	29360	Register the peer RTU Address	NET[MCU]	Normal	Data 1: **Number of NETLIST runners in RunnerSource** Data1 Type: NETLISTRNR Data 2: **Size of runner in RTU addresses** Data2 Type: RTUAddress Data 3: **RTU address of the controls for each stop along the way** Data3 Type: RTUAddress Data 4:Null Data4 Type: ushort
72B1	29361	NetX statemachA state03 peer regs fail	NET[MCU]	Normal	NetX state machine A state 03 peer registration has failed Data 1: **Runner Number** Data1 Type: RunnerNumber Data 2: **RTU Address** Data2 Type: RTUAddress Data 3: **Registration Status** Data3 Type: RegistrationStatus Data 4:Null Data4 Type: ushort
72B2	29362	NetX statemachA state03 all peers regs	NET[MCU]	Normal	NetX state machine A state 03 all peers registered Data 1: **Common check runners timeout counter** Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3: **Number of NETLIST runners in RunnerSource** Data3 Type: NETLISTRNR Data 4:Null Data4 Type: ushort
72B3	29363	Netx state machA state 03 timeout failed	NET[MCU]	Normal	Netx state machine A state 03 timeout failed Data 1: **Common check of NETLIST runners in RunnerSource** Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3: **Number of NETLIST runners in RunnerSource** Data3 Type: NETLISTRNR Data 4:Null Data4 Type: ushort
72B4	29364	NETX statemachA state03 make rnrs failed	NET[MCU]	Normal	NETX state machine A state 03 make runners failed Data 1: **NETV source normal** Data1 Type: NETVSRC Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
72B5	29365	NETX state machine A state 04 arrival	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2: **go ahead and SEND the CCRs** Data2 Type: StatusFeedbackArea Data 3: **Create comm check runners and launch, then wait for**

					return Data3 Type: StatusFeedbackArea Data 4:Null Data4 Type: ushort
72B6	29366	NETX state machine A state 04 is done	NET[MCU]	Normal	Data 1: **Common check of NETLIST runners in RunnerSource** Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3: **Number of NETLIST runners in RunnerSource** Data3 Type: NETLISTRNR Data 4:Null Data4 Type: ushort
72B7	29367	NETX state machine A state 05 arrival	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2: **Start FN delivery Runners** Data2 Type: StatusFeedbackArea Data 3: **go ahead and SEND the CCRs** Data3 Type: StatusFeedbackArea Data 4:Null Data4 Type: ushort
72B8	29368	NETX statemachA state 05 arrival FNet ID	NET[MCU]	Normal	NETX state machine A state 05 arrival FeederNET ID Data 1: **Feeder Net incoming team array number of teams** Data1 Type: INCNUMTEAM Data 2: **Number of NETLIST runners in RunnerSource** Data2 Type: NETLISTRNR Data 3: **Incoming new Feeder Net ID from IntelliTeam Designer** Data3 Type: FeederNetID Data 4:Null Data4 Type: ushort
72B9	29369	NETX state machine A state 06 arrival	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2: **Send activate runners** Data2 Type: StatusFeedbackArea Data 3: **Start FN delivery Runners** Data3 Type: StatusFeedbackArea Data 4:Null Data4 Type: ushort
72BA	29370	NETX state machine A state 07 arrival	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2: **Dashboard Feedback at the end of the successful deployment** Data2 Type: StatusFeedbackArea Data 3: **Send activate runners** Data3 Type: StatusFeedbackArea Data 4:Null Data4 Type: ushort
72BB	29371	NETX state machine A state 11 arrival	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2: **Error Reporting** Data2 Type: StatusFeedbackArea Data 3: **Dashboard Feedback at the end of the successful deployment** Data3 Type: StatusFeedbackArea Data 4:Null Data4 Type: ushort
72BF	29375	NETX state machine C state 2 arrival	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2: **Checks Registrations of the Destination RTU Addresses for the CCRs to be sent** Data2 Type: StatusFeedbackArea Data 3: **Error Reporting** Data3 Type: StatusFeedbackArea Data 4:Null Data4 Type: ushort
72C0	29376	NETX statemachC state2 regs is good	NET[MCU]	Normal	NETX state machine C state 2 registration is good Data 1: **Runner Number** Data1 Type: RunnerNumber Data 2: **RTU Address** Data2 Type: RTUAddress

					Data 3: **Registration Status** Data3 Type: RegistrationStatus Data 4:Null Data4 Type: ushort
72C1	29377	NETX state machC state 2 regs failed	NET[MCU]	Normal	NETX state machine C state 2 registration failed Data 1: **Runner Number** Data1 Type: RunnerNumber Data 2: **RTU Address** Data2 Type: RTUAddress Data 3: **Registration Status** Data3 Type: RegistrationStatus Data 4:Null Data4 Type: ushort
72C2	29378	NETX state machine C state 02 is done	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2: **Current state of machine C State 2** Data2 Type: StatusFeedbackArea Data 3: **Previous state of machine C State 2** Data3 Type: StatusFeedbackArea Data 4:Null Data4 Type: ushort
72C3	29379	NETX state machine D state 01 Arrival	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2: **Idle state waiting for management Sequence to be initiated upon need** Data2 Type: StatusFeedbackArea Data 3: **Null** Data3 Type: StatusFeedbackArea Data 4:Null Data4 Type: ushort
72C4	29380	NETX state machine D state 02 Arrival	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2: **Registers the RTU of the control that sent the Netlist Reporter Runner to us** Data2 Type: StatusFeedbackArea Data 3: **Idle state waiting for management Sequence to be initiated upon need** Data3 Type: StatusFeedbackArea Data 4:Null Data4 Type: ushort
72C5	29381	NETX state machD state 2 registered DNP	NET[MCU]	Normal	NETX state machine D state 2 registered DNP Data 1: **RTU Address** Data1 Type: RTUAddress Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
72C6	29382	NETX state machine D state 3 arrival	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2: **Checks on and waits for successful registration of the DNP Address from D0** Data2 Type: StatusFeedbackArea Data 3: **Registers the RTU of the control that sent the Netlist Reporter Runner to us** Data3 Type: StatusFeedbackArea Data 4:Null Data4 Type: ushort
72C7	29383	NETX state machD state 03 regs failed	NET[MCU]	Normal	NETX state machine D state 03 registration failed Data 1: **RTU Address** Data1 Type: RTUAddress Data 2:Null Data2 Type: ushort Data 3: **Registration Status** Data3 Type: RegistrationStatus Data 4:Null Data4 Type: ushort
72C8	29384	NETX statemachD state 03 regs is good	NET[MCU]	Normal	NETX state machine D state 03 registration is good Data 1: **RTU Address** Data1 Type: RTUAddress Data 2:Null Data2 Type: ushort Data 3: **Registration Status** Data3 Type: RegistrationStatus Data 4:Null Data4 Type: ushort
72C9	29385	NETX state machine D state 04 arrival	NET[MCU]	Normal	

					Data 1:Null Data1 Type: ushort Data 2: **Scans the list of reported Primary FeederNets and requests each one with delay between each request provided by next state waiting on the reply.** Data2 Type: StatusFeedbackArea Data 3: **Checks on and waits for successful registration of the DNP Address from D0** Data3 Type: StatusFeedbackArea Data 4:Null Data4 Type: ushort
72CA	29386	NETX state machine D state 05 arrival	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2: **Waits until the requested Feeder Net has been returned then goes back to previous state** Data2 Type: StatusFeedbackArea Data 3: **Scans the list of reported Primary FeederNets and requests each one with delay between each request provided by next state waiting on the reply.** Data3 Type: StatusFeedbackArea Data 4:Null Data4 Type: ushort
72CB	29387	NETX state machine D state 06 arrival	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2: **the list of reported Adjacent FeederNets and requests each one with delay between each request provided by next state waiting on the reply** Data2 Type: StatusFeedbackArea Data 3: **Waits until the requested Feeder Net has been returned then goes back to previous state** Data3 Type: StatusFeedbackArea Data 4:Null Data4 Type: ushort
72CC	29388	NETX state machine D state 07 arrival	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2: **Waits until the requested Feeder Net has been returned then goes back to previous state** Data2 Type: StatusFeedbackArea Data 3: **The list of reported Adjacent FeederNets and requests each one with delay between each request provided by next state waiting on the reply** Data3 Type: StatusFeedbackArea Data 4:Null Data4 Type: ushort
72CD	29389	NETX state machine D state 08 arrival	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2: **All Delivered now, proceed to apply** Data2 Type: StatusFeedbackArea Data 3: **Waits until the requested Feeder Net has been returned then goes back to previous state** Data3 Type: StatusFeedbackArea Data 4:Null Data4 Type: ushort
72CE	29390	NETX state machD state8 make div net	NET[MCU]	Normal	NETX state machine D state 8 make division net Data 1: **Record Where in VM find array this net list is in** Data1 Type: ushort Data 2: **Feeder Net ID** Data2 Type: FeederNetID Data 3: **Feeder Net CRC** Data3 Type: FeederNetCRC Data 4: **Null** Data4 Type: ushort
72CF	29391	NETX state machine D state 9 arrival	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2: **Registers New RTUs and copies our DivisionNet information to appropriate tables** Data2 Type: StatusFeedbackArea Data 3: **All Delivered now, proceed to apply** Data3 Type: StatusFeedbackArea Data 4:Null Data4 Type: ushort

72D0	29392	NETX state machine D state 09 Make Nodes	NET[MCU]	Normal	Data 1: **Index into the substation list for Feeder Net "tree root"** Data1 Type: Substation Data 2: **Power Source Data-Starting Row in Present NetView for this Power Source** Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
72D1	29393	NETX state machD state9 make nodes fail	NET[MCU]	Normal	NETX state machine D state 9 make nodes fail Data 1:Null Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
72D2	29394	NETX state machine D state 10 arrival	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2: **Cleanup and return to Idle state** Data2 Type: StatusFeedbackArea Data 3: **All Delivered now, proceed to apply** Data3 Type: StatusFeedbackArea Data 4: **Null** Data4 Type: ushort
72D3	29395	NETX state machine E state 01 arrival	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2: **Runner Source Device Data Collection and Data Distribution manager IDLEStarts Runners on signal from State Machine F State 4 when it finds we are a runner source** Data2 Type: StatusFeedbackArea Data 3: **Cleanup and return to Idle state** Data3 Type: StatusFeedbackArea Data 4:Null Data4 Type: ushort
72D4	29396	NETX state machine F state 01 Arrival	NET[MCU]	Normal	Data 1: **Runner Number for non-runner source devices** Data1 Type: RunnerNumber Data 2: **State Machine F Manages sequences of operations in support of multiple simultaneous, Netlist Distributions** Data2 Type: StatusFeedbackArea Data 3: **Null** Data3 Type: StatusFeedbackArea Data 4: **Null** Data4 Type: ushort
72D5	29397	NETX state machine F state 02 Arrival	NET[MCU]	Normal	Data 1: **Runner Number for non-runner source devices** Data1 Type: RunnerNumber Data 2: **This state waits for the arrival of all required Activation Runners then applies the new Feeder Net to NETV and DAT** Data2 Type: StatusFeedbackArea Data 3: **State Machine F Manages sequences of operations in support of multiple simultaneous, Netlist Distributions** Data3 Type: StatusFeedbackArea Data 4: **Null** Data4 Type: ushort
72D6	29398	NETX state machine F state 03 Arrival	NET[MCU]	Normal	Data 1: **Runner Number for non-runner source devices** Data1 Type: RunnerNumber Data 2: **This state waits for the arrival of all required Activation Runners then applies the new Feeder Net to NETV and DAT** Data2 Type: StatusFeedbackArea

					Data 3: **State Machine F Manages sequences of operations in support of multiple simultaneous, Netlist Distributions** Data3 Type: StatusFeedbackArea Data 4: **Null** Data4 Type: ushort
72D7	29399	NETX state machine F state 04 Arrival	NET[MCU]	Normal	Data 1: **Runner Number for non-runner source devices** Data1 Type: RunnerNumber Data 2: **Releases our claim on PushingHoldoff, then waits for all appropriate runners to have returned,then Analyzes to see if this is a runner source, lists Runners if yes, checks RSD Registration** Data2 Type: StatusFeedbackArea Data 3: **State Machine F Manages sequences of operations in support of multiple simultaneous, Netlist Distributions** Data3 Type: StatusFeedbackArea Data 4: **Null** Data4 Type: ushort
72D8	29400	NETX state machF state 04 runner source	NET[MCU]	Normal	NETX state machine F state 04 runner source Data 1: **Runner Source Device** Data1 Type: RSD Data 2: **Null** Data2 Type: ushort Data 3: **Null** Data3 Type: ushort Data 4: **Null** Data4 Type: ushort
72DA	29402	NETX state machine G state 01 Arrival	NET[MCU]	Normal	Data 1: **Null** Data1 Type: ushort Data 2: **State Machine G Manages sequences of operations in support of Sending of Feeder Net Deployment Runner Objects. State 1 is the IdleState** Data2 Type: StatusFeedbackArea Data 3: **Null** Data3 Type: StatusFeedbackArea Data 4: **Null** Data4 Type: ushort
72DB	29403	NETx state machine G state 01 deployment	NET[MCU]	Normal	Data 1: **Incoming number of teams** Data1 Type: INCNUMTEAM Data 2: **Number of netlist runners** Data2 Type: NETLISTRNR Data 3: **Feeder Net ID from IntelliTeam Designer** Data3 Type: FeederNetID Data 4: **Null** Data4 Type: ushort
72DC	29404	NETX state machine G state 02 Arrival	NET[MCU]	Normal	Data 1: **Null** Data1 Type: ushort Data 2: **G State 2 Creates and sends (store object) until the runner-list required number of runners has been sent** Data2 Type: StatusFeedbackArea Data 3: **State Machine G Manages sequences of operations in support of Sending of Feeder Net Deployment Runner Objects** Data3 Type: StatusFeedbackArea Data 4: **Null** Data4 Type: ushort
72DD	29405	NETX state machG state02 store object	NET[MCU]	Normal	NETX state machine G state 02 store object Data 1: **Runner Number** Data1 Type: RunnerNumber Data 2: **RTU Address** Data2 Type: RTUAddress Data 3: **Data Length** Data3 Type: DataLength Data 4:Null Data4 Type: ushort
72E1	29409	NETX state machH state02 storeage ok	NET[MCU]	Normal	NETX state machine H state 02 storeage ok Data 1: **Runner Number** Data1 Type: RunnerNumber Data 2: **Destination RTU Address** Data2 Type: RTUAddress Data 3: **Null** Data3 Type: ushort Data 4: **Null** Data4 Type: ushort

72E6	29414	NETX too many in Netview row	NET[MCU]	Normal	NETX too many in Netview row (would overflow) Data 1: **Current row number** Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
72E7	29415	NETX too many Netview columns	NET[MCU]	Normal	Data 1: **Current row number** Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
72E8	29416	Overflow the device instance table	NET[MCU]	Normal	Data 1: **Device Type** Data1 Type: dev Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
72E9	29417	NETX too many substations in Feeder Net	NET[MCU]	Normal	Would overflow Data 1: **Number of team record** Data1 Type: nt Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
72EA	29418	NETX too many netx devices	NET[MCU]	Normal	Data 1:Null Data1 Type: ushort Data 2: **Number of device connection present,counter,list length** Data2 Type: nsngl Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
72EB	29419	NETX too many netx columns	NET[MCU]	Normal	If Data4 is 4 then data 1 would be the deviceCountTotal Data 1:Null Data1 Type: ushort Data 2: **Number of device connection present,counter,list length** Data2 Type: nsngl Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
72EC	29420	NETX too many netx rows	NET[MCU]	Normal	If Data4 is 10 then data 1 would be the deviceCountTotal Data 1:Null Data1 Type: ushort Data 2: **Number of device connection present,counter,list length** Data2 Type: nsngl Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
72ED	29421	NETX too many NETV rows	NET[MCU]	Normal	Data 1: **Current row number** Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
72EE	29422	NETX too many DGs in Feeder Net	NET[MCU]	Normal	Data 1: **Current row number** Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
72EF	29423	NETX found DG in Feeder Net	NET[MCU]	Normal	

					Data 1: **Current row number** Data1 Type: ushort Data 2:Null Data2 Type: ushort Data 3:Null Data3 Type: ushort Data 4:Null Data4 Type: ushort
A001	40961	IMS Call Issue	ATX[DSP]	All	Call to IMS returned nonzero. Data 1: **IMS Return Code** Data1 Type: IMSRetCode
A002	40962	Return to Initial Settings Issue	ATX[DSP]	All	Attempt to return to Initial Trip not allowed. There are timing Controller elements. Data 1: **ATX State** Data1 Type: ATXState Data 2: **Issue reason** Data2 Type: ITIssueCode Data 3: **Mask of timing OC elements** Data3 Type: ushort Data 4: **Mask of timing misc elements** Data4 Type: ushort
A003	40963	External Command Received	EVT[DSP]	Normal	Data 1: **Command Code** Data1 Type: CommandCode Data 2: **Command Argument #1** Data2 Type: CommandArgument Data 3: **Command Argument #2** Data3 Type: CommandArgument2 Data 4: **Command Argument #3** Data4 Type: CommandArgument3
A004	40964	Time Source Changed	ATX[DSP]	Extended	If the Time source changes between GPS and local Clock this event is logged. Data 1: **New Time Source** Data1 Type: DSPTimeSource Data 2: **Old Time Source** Data2 Type: DSPTimeSource
A005	40965	Switch to Next Test Settings	ATX[DSP]	Normal	Choosing the next set of curves for Reclosing operation. Data 1: Data1 Type: ushort Data 2: Data2 Type: ShiftType Data 3: Data3 Type: ATXState
A006	40966	Switch To Next Test Group Issue	ATX[DSP]	Normal	Choosing the next set of curves not allowed. Either curves are not configured or there are timing elements. Data 1: Data1 Type: ShiftType Data 2: Data2 Type: ATXState
A007	40967	Coord Curve Shift Direction X	ATX[DSP]	Normal	External command or sequence coordination element requested a shift
A008	40968	Next Operation in Test Sequence	EVT[DSP]	Normal	Advance in test sequence. The type of the next operation is logged. Data 1: **Operation Number** Data1 Type: OperationNumber Data 2: **Operation Type** Data2 Type: OperationType
A009	40969	Pole test postponed - no source	ATX[DSP]	Normal	Source voltage is lost on one or more poles to be tested. Testing on these poles isn postponed. Data 1: **List of poles that have no viable voltage** Data1 Type: PoleMask
A00A	40970	Pole Open (1-phase operation)	EVT[DSP]	Normal	Notification from IMS received by ATX. Data 1: **Pole Name** Data1 Type: PoleName
A00B	40971	Pole Closed (1-phase operation)	EVT[DSP]	Normal	Notification from IMS received by ATX. Data 1: **Pole Name** Data1 Type: PoleName
A00C	40972	All Poles Open - 3-phase operation	EVT[DSP]	Normal	Notification from IMS received by ATX.
A00D	40973	All Poles Closed - 3-phase operation	EVT[DSP]	Normal	Notification from IMS received by ATX.

A00E	40974	IMS STUB: Open3 Fired	ATX[DSP]	Normal	Debug message - should not appear in production.
A00F	40975	IMS STUB: Open3 Done	ATX[DSP]	Normal	Debug message - should not appear in production.
A010	40976	IMS STUB: Close3 Fired	ATX[DSP]	Normal	Debug message - should not appear in production.
A011	40977	IMS STUB: Close3 Done	ATX[DSP]	Normal	Debug message - should not appear in production.
A012	40978	IMS STUB: Pulse3 Fired	ATX[DSP]	Normal	Debug message - should not appear in production.
A014	40980	IMS STUB: Pulse1 Fired	ATX[DSP]	Normal	Debug message - should not appear in production. Data 1: **Pole Name** Data1 Type: PoleName
A015	40981	IMS STUB: Pulse1 Done	ATX[DSP]	Normal	Debug message - should not appear in production. Data 1: **Pole Name** Data1 Type: PoleName
A016	40982	Cannot Use 3Ph - Poles locked Out	ATX[DSP]	Normal	Debug message - should not appear in production. Data 1: **Pole Mask** Data1 Type: PoleMask
A017	40983	IMS STUB: Close1 Done	ATX[DSP]	Normal	Debug message - should not appear in production. Data 1: **Pole Name** Data1 Type: PoleName
A018	40984	Synch Check Prevents Closing	EVT[DSP]	Normal	CLOSE command rejected.
A019	40985	Low Control Energy	ATX[DSP]	Normal	IPM reported insufficient energy.
A01A	40986	Profile Not Replaced	ATX[DSP]	Normal	Request to replace active profile with timing elements or replace closing profile during CLOSE. Data 1: **Profile number** Data1 Type: ProfileNumber
A01B	40987	Profile Replaced	ATX[DSP]	Normal	The requested profile was successfully replaced. Data 1: **Profile number** Data1 Type: ProfileNumber
A01C	40988	New Profile Established	ATX[DSP]	Normal	Any change of current profile. Data 1: **Profile number** Data1 Type: ProfileNumber Data 2: **Old Profile number** Data2 Type: ProfileNumber
A01D	40989	New Profile Not Established	ATX[DSP]	Normal	Profile was not properly loaded so it cannot be set as a current profile. Or explicit command to set a profile issued while elements are timing. Data 1: **Profile number** Data1 Type: ProfileNumber Data 2: **Old Profile number** Data2 Type: ProfileNumber
A01E	40990	ATX ERROR State	ATX[DSP]	Normal	The device has entered the ERROR State. The ERROR state indicates a serious condition has occured and the device can no longer perform its basic open and closing functions. Please report this condition to an product represenative immediately. Data 1: **Abort Reason** Data1 Type: AbortReason
A01F	40991	Locked Open State	EVT[DSP]	Normal	This state is entered when the manual handel is pulled to the "open" position and the contacts are pried open. While the Manual handle is in this position it is physically impossible for the poles to close as there is a physical block preventing all closing operations. To exist this state the user must move the manual handle to the neutral position before a close operation can occur.
A020	40992	Initialization State	EVT[DSP]	Normal	This is the state that the IntelliRupter must enter on powerup to determine what is happening in the physical world around it.

A021	40993	Closed Initial Trip State	EVT[DSP]	Normal	New ATX state entered. Data 2: **This state can be 1phase** Data2 Type: ATXMode
A022	40994	Wait to Trip Open State	EVT[DSP]	Normal	New ATX state entered. Data 2: **This state can be 1phase** Data2 Type: ATXMode
A023	40995	All Poles Open and Locked Out	EVT[DSP]	Normal	This state is logged when the device has all three poles open and no more testing will be done do to an automatic test sequence. Data 2: **This state can be 1phase** Data2 Type: ATXMode
A024	40996	Open in Test State	EVT[DSP]	Normal	New ATX state entered. Data 2: **This state can be 1phase** Data2 Type: ATXMode
A025	40997	Pulse Delayed State	EVT[DSP]	Normal	New ATX state entered.
A026	40998	Reclosing State	EVT[DSP]	Normal	New ATX state entered.
A027	40999	Pulsing State	EVT[DSP]	Normal	New ATX state entered.
A028	41000	Wait Test Result State	EVT[DSP]	Normal	New ATX state entered. Data 2: **This state can be 1phase** Data2 Type: ATXMode
A029	41001	Cancel Operation State	EVT[DSP]	Normal	New ATX state entered. Data 2: **This state can be 1phase** Data2 Type: ATXMode
A02A	41002	Wait Cancel Operation State	EVT[DSP]	Normal	New ATX state entered.
A02B	41003	Closed in Test State	EVT[DSP]	Normal	New ATX state entered. Data 2: **This state can be 1phase** Data2 Type: ATXMode
A02C	41004	Pulse Close Delayed State	EVT[DSP]	Normal	New ATX state entered.
A02D	41005	Pulse Close State	EVT[DSP]	Normal	New ATX state entered.
A02E	41006	Wait for Pulse Close Results State	EVT[DSP]	Normal	New ATX state entered.
A02F	41007	Closed in Closed Profile State	EVT[DSP]	Normal	New ATX state entered. Data 2: **This state can be 1phase** Data2 Type: ATXMode
A030	41008	Wait Closing State	EVT[DSP]	Normal	New ATX state entered. Data 2: **This state can be 1phase** Data2 Type: ATXMode
A031	41009	Reinitialization State	EVT[DSP]	Normal	New ATX state entered.
A032	41010	Closed in Coordination State	EVT[DSP]	Normal	New ATX state entered. Data 2: **This state can be 1phase** Data2 Type: ATXMode
A033	41011	Delay to Close State	EVT[DSP]	Normal	New ATX state entered. Data 2: **This state can be 1phase** Data2 Type: ATXMode
A034	41012	Execute Close State	EVT[DSP]	Normal	New ATX state entered. Data 2: **This state can be 1phase** Data2 Type: ATXMode
A035	41013	Suspend Operation-Low Energy	EVT[DSP]	Normal	New ATX state entered.
A036	41014	Replacing Active Profile	EVT[DSP]	Normal	New ATX state entered.
A037	41015	Waiting Test Open	EVT[DSP]	Normal	New ATX state entered.
A038	41016	Waiting Manual Open	EVT[DSP]	Normal	Control is waiting for the end of open operation initiated by manual lever.

A039	41017	Special Test State	ATX[DSP]	Normal	Control is in special Test State.
A03A	41018	Idle State	ATX[DSP]	Normal	PRO and ATX are in the Idle State.
A03B	41019	Shutdown State	ATX[DSP]	Normal	Control is shutting down due to loss of control power.
A03C	41020	Unpowered State	ATX[DSP]	Normal	Protection processor is ready for loss of power.
A03D	41021	Hot-Line Tag Profile Active	EVT[DSP]	Normal	Hot-Line Tag Profile Active.
A03E	41022	Hot-Line Tag Profile Not Active	ATX[DSP]	Normal	Hot-Line Tag Profile Not Active.
A03F	41023	Hot-Line Tag Lever Applied	EVT[DSP]	Normal	Manual lever operation.
A040	41024	Hot-Line Tag Lever Removed	EVT[DSP]	Normal	Manual lever operation.
A041	41025	Hot-Line Tag Lever Clear All	EVT[DSP]	Normal	Double Manual lever operation.
A042	41026	Data Acquisition Issue	ATX[DSP]	All	Calculations do not fit into real time schedule. Data 1: **ISR Counter** Data1 Type: ushort
A043	41027	ATX Hold Command Executed	ATX[DSP]	Normal	
A044	41028	ATX Run Command Executed	ATX[DSP]	Normal	
A045	41029	Freq Check Issue - No System Voltage	ATX[DSP]	All	Low voltage prevents frequency check.
A046	41030	Freq Measured Doesn't Match Config	ATX[DSP]	Normal	Different nominal frequency detected. Data 1: **Measured System Frequency** Data1 Type: SystemFrequency
A047	41031	Sys Freq Changed by Comm Proc	ATX[DSP]	Normal	Data 1: **Old System Frequency** Data1 Type: SystemFrequency Data 2: **New System Frequency** Data2 Type: SystemFrequency
A048	41032	Prot Prcsr Timeout no ATXRun Cmd	ATX[DSP]	Normal	MCU did not issue this command in time during processor startup. Restricted protection mode started.
A049	41033	Abnormal Prot Proc Restart	ATX[DSP]	Normal	Safe time (four hours) has elapced since the previous abnormal reset. Data 1: **DSP Time Source** Data1 Type: DSPTimeSource Data 2: **Time elapsed from previous abnormal restart - Part 1** Data2 Type: ushort Data 3: **Time elapsed from previous abnormal restart - Part 2** Data3 Type: ushort
A04A	41034	Control Power Out Time Unknown	ATX[DSP]	Normal	The time when the DSP processor stopped cannot be determined. Data 1: **New Time Source** Data1 Type: DSPTimeSource Data 2: **Old Time Source** Data2 Type: DSPTimeSource
A04B	41035	Optional Disconnect Open	EVT[DSP]	Normal	Mechanical switch position.
A04C	41036	Optional Disconnect Closed	EVT[DSP]	Normal	Mechanical switch position.
A04D	41037	Coordination Curve Shift Dir X off	ATX[DSP]	Normal	External command or reset timer forced initial trip settings
A04E	41038	ATX Manual Op Clear - Rejected	ATX[DSP]	Normal	ATX Manual Op Clear - Rejected Data 1: Data1 Type: ManOpClrReject

A04F	41039	Manual Lever Moved to Open	EVT[DSP]	Normal	Manual Lever Moved to Open
A050	41040	Manual Lever Moved to Neutral	EVT[DSP]	Normal	or is initially in this position.
A051	41041	Manual Lever Moved to Close	EVT[DSP]	Normal	or is initially in this position.
A052	41042	Control Sleep Time Determined	ATX[DSP]	Normal	Data 1: **Sleep time - Part1** Data1 Type: ushort Data 2: **Sleep time - Part2** Data2 Type: ushort
A053	41043	Comm Proc No RTC on Power-Up	ATX[DSP]	Normal	
A054	41044	Control Seq Disabled to Proceed	ATX[DSP]	Normal	Too much time elapsed without power.
A055	41045	Control Sequence Allowed to Proceed	ATX[DSP]	Normal	Sleep time within the limits. Test sequence can be resumed.
A056	41046	Startup Frequency Check Success	ATX[DSP]	Normal	
A057	41047	Protection Processor Reset Status	ATX[DSP]	Normal	Contents of 0x200-3 on reset logged. Data 1: **200-201** Data1 Type: ushort Data 2: **202-203** Data2 Type: ushort
A058	41048	Calibration Data Updated	ATX[DSP]	Normal	
A059	41049	SEEPROM Calibration Data Changed	ATX[DSP]	Normal	
A05A	41050	Calib Data Reloaded From SEEPROM	ATX[DSP]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort
A05B	41051	External Command Rejected	EVT[DSP]	Normal	Close command not in fully open state. Set HLT when ATX is disabled. Data 1: **Command Code** Data1 Type: CommandCode Data 2: **Current ATX State** Data2 Type: ATXState Data 3: **Command rejection reason** Data3 Type: ATXCmdRejectReason
A05C	41052	Total Energy Counters Cleared	ATX[DSP]	Normal	by external command.
A05D	41053	SEEPROM Operational Issue	ATX[DSP]	All	Problems with serial EEPROM operations. Data 1: **Error Source** Data1 Type: SEEPErrorCode
A05E	41054	Prot Proc Abnormal Restart	ATX[DSP]	Normal	Data 1: **Abnormal reset details** Data1 Type: AbnormalRestartCode
A05F	41055	SEEPROM Task Queue is Full	ATX[DSP]	Normal	
A060	41056	Wrong Calibration Data CRC	ATX[DSP]	Normal	Either of CCP board or Application board calibration data CRC is bad. Data 1: **Sensors CRC status** Data1 Type: CalDataCRCStatus Data 2: **Application board CRC status** Data2 Type: CalDataCRCStatus Data 3: **CCP board CRC status** Data3 Type: CalDataCRCStatus

A061	41057	Phase Rotation Changed	ATX[DSP]	Normal	Phase rotation change has been detected. Data 1: **New rotation** Data1 Type: SystemRotation Data 2: **Previous rotation** Data2 Type: SystemRotation Data 3: **One half of nominal system voltage in Volts** Data3 Type: ushort Data 4: **One quarter of nominal system voltage in Volts** Data4 Type: ushort
A062	41058	Control Calib Data CRCs are OK	ATX[DSP]	Normal	Both CCP board and Application board calibration data CRC is correct.
A063	41059	Significant ATX Error	ATX[DSP]	Normal	Self diagniostics of a crash - report to developers.
A065	41061	Protect. Elmt Enters Timing State	EVT[DSP]	Normal	Data 1: **Relay Type** Data1 Type: RelayType Data 2: **Relay number** Data2 Type: RelayNumber Data 3: **Driver value (Generic according to Relay Type)** Data3 Type: DriverValue
A066	41062	Protect. Element Overtravel State	PRO[DSP]	Normal	Data 1: **Relay Type** Data1 Type: RelayType Data 2: **Relay Number** Data2 Type: RelayNumber Data 3: **Driver value (Generic according to Relay Type)** Data3 Type: DriverValue
A067	41063	Protect. Elmt Reached Trip State	EVT[DSP]	Normal	Data 1: **Relay Type** Data1 Type: RelayType Data 2: **Relay Number** Data2 Type: RelayNumber Data 3: **Driver value (Generic according to Relay Type)** Data3 Type: DriverValue
A068	41064	Protect. Elmt Reached Reset State	PRO[DSP]	Normal	Data 1: **Relay Type** Data1 Type: RelayType Data 2: **Relay Number** Data2 Type: RelayNumber Data 3: **Driver value (Generic according to Relay Type)** Data3 Type: DriverValue
A069	41065	Protect. Elmt Reached 20% Milestone	PRO[DSP]	Normal	Data 1: **Relay Type** Data1 Type: RelayType Data 2: **Relay Number** Data2 Type: RelayNumber Data 3: **Driver value (Generic according to Relay Type)** Data3 Type: DriverValue
A06A	41066	Protect. Elmt Reached 50% Milestone	PRO[DSP]	Normal	Data 1: **Relay Type** Data1 Type: RelayType Data 2: **Relay Number** Data2 Type: RelayNumber Data 3: **Driver value (Generic according to Relay Type)** Data3 Type: DriverValue
A06B	41067	Protect. Elmt Reached 80% Milestone	PRO[DSP]	Normal	Data 1: **Relay Type** Data1 Type: RelayType Data 2: **Relay Number** Data2 Type: RelayNumber Data 3: **Driver value (Generic according to Relay Type)** Data3 Type: DriverValue
A06C	41068	Log Max Value	PRO[DSP]	Normal	Maximum of the driver value in tripped state. Data 1: **Relay Type** Data1 Type: RelayType Data 2: **Relay Number** Data2 Type: RelayNumber

					Data 3: **Driver value (Generic according to Relay Type)** Data3 Type: DriverValue
A06D	41069	High Current Lockout	EVT[DSP]	Normal	IntelliRupter proceeds to lockout with no further testing. Data 1: **Relay Type** Data1 Type: RelayType Data 2: **Relay Number** Data2 Type: RelayNumber Data 3: **Driver value (Current)** Data3 Type: DriverValueCurrent
A06E	41070	Current Below Lockout Threshold	PRO[DSP]	Normal	Testing is possible. Data 1: **Relay Type** Data1 Type: RelayType Data 2: **Relay Number** Data2 Type: RelayNumber Data 3: **Driver value (Current)** Data3 Type: DriverValueCurrent
A06F	41071	Current Above Cutoff	EVT[DSP]	Normal	Protective element should start timing to trip. Data 1: **Relay Type** Data1 Type: RelayType Data 2: **Relay Number** Data2 Type: RelayNumber Data 3: **Driver value (Current)** Data3 Type: DriverValueCurrent
A070	41072	Current Below Cutoff	EVT[DSP]	Normal	Protective element should start timing to reset. Data 1: **Relay Type** Data1 Type: RelayType Data 2: **Relay Number** Data2 Type: RelayNumber Data 3: **Driver value (Current)** Data3 Type: DriverValueCurrent
A071	41073	Cold Load Element in Delay to Set	EVT[DSP]	Normal	Data 1: **Relay Type** Data1 Type: RelayType Data 2: **Relay Number** Data2 Type: RelayNumber Data 3: **CLF value** Data3 Type: CLFValue Data 4: **Voltage** Data4 Type: ushort
A072	41074	Cold Load Element in Cooling State	EVT[DSP]	Normal	Data 1: **Relay Type** Data1 Type: RelayType Data 2: **Relay Number** Data2 Type: RelayNumber Data 3: **CLF value** Data3 Type: CLFValue Data 4: **Voltage** Data4 Type: ushort
A073	41075	Cold Load Element in Delay to Reset	EVT[DSP]	Normal	Data 1: **Relay Type** Data1 Type: RelayType Data 2: **Relay Number** Data2 Type: RelayNumber Data 3: **CLF value** Data3 Type: CLFValue Data 4: **Voltage** Data4 Type: ushort
A074	41076	Cold Load Element in Warming State	EVT[DSP]	Normal	Data 1: **Relay Type** Data1 Type: RelayType Data 2: **Relay Number** Data2 Type: RelayNumber Data 3: **CLF value** Data3 Type: CLFValue Data 4: **Voltage** Data4 Type: ushort
A075	41077	Log Cold Load Factor Value	PRO[DSP]	Normal	Logged when changes. Data 1: **Relay Type** Data1 Type: RelayType Data 2: **Relay Number** Data2 Type: RelayNumber Data 3: **CLF value** Data3 Type: CLFValue Data 4: **Voltage** Data4 Type: ushort
A076	41078	Pulse Authorized - Backfeed Allowed	PRO[DSP]	Normal	Backfeed detected but pulsing not blocked. Data 1: Data1 Type: TstBackfeedCommandArg
A077	41079	Pulse Inhibited. Backfeed Prohibits	PRO[DSP]	Normal	Backfeed detected and pulsing is blocked on backfeed.

A078	41080	Directional Element Activated	PRO[DSP]	Normal	Because at least one pole is closed. Data 1: **Side which is currently used as a source side.** Data1 Type: good_sourceRelayArg Data 2: **System voltage used by the Directional Element for torque calculation. This can be line voltage or memory voltage.** Data2 Type: ushort Data 3: **Number of Directional Elements** Data3 Type: ushort
A079	41081	Initial Dir opp of OC elements timing	PRO[DSP]	Normal	No fault detected, both DE flags are cleared. This message is logged when 2-cycle timer is expired but both DE flags are cleared. Data 1: **Zero sequence trace info** Data1 Type: zs_traceInfo Data 2: **Negative sequence trace info.** Data2 Type: ns_traceInfo Data 3: **Phase trace info** Data3 Type: phase_traceInfo Data 4: **Auxilary data of the DE algorithm workflow** Data4 Type: DEauxData
A07A	41082	Protection Elements Blocked By DE	PRO[DSP]	Normal	Output of the Directional Element has changed and overcurrent protection elements looking at unfaulted side are disabled and reset. Data 1: **Faulted side or load side as determined by the Directional Element. Possible values are TermX or TermY or Both. In the latter case all overcurrent elements run without directional supervision.** Data1 Type: DETerm Data 2: **Element disabled by the Directional Element** Data2 Type: ElemDisabedByDE Data 3: **Total System Torque** Data3 Type: ushort Data 4: **SEF component of torque** Data4 Type: ushort
A07B	41083	Directional Element Fault on X	PRO[DSP]	Normal	Data 1: **Zero sequence trace info** Data1 Type: zs_traceInfo Data 2: **Negative sequence trace info.** Data2 Type: ns_traceInfo Data 3: **Phase trace info** Data3 Type: phase_traceInfo Data 4: **Auxilary data of the DE algorithm workflow** Data4 Type: DEauxData
A07C	41084	Directional Element Fault on Y	PRO[DSP]	Normal	Data 1: **Zero sequence trace info** Data1 Type: zs_traceInfo Data 2: **Negative sequence trace info.** Data2 Type: ns_traceInfo Data 3: **Phase trace info** Data3 Type: phase_traceInfo Data 4: **Auxilary data of the DE algorithm workflow** Data4 Type: DEauxData
A07D	41085	Pulse Finding Trip	EVT[DSP]	Normal	Pulse finding generated trip signal. Data 1: **Tripped Pole** Data1 Type: PoleName
A07E	41086	Log Fault Currents	EVT[DSP]	Normal	Maximum phase currents and residual while in the trip state. Data 1: **Pole 1 Current** Data1 Type: PoleCurrent Data 2: **Pole 2 Current** Data2 Type: PoleCurrent Data 3: **Pole 3 Current** Data3 Type: PoleCurrent Data 4: **Residual Current** Data4 Type: PoleCurrent
A07F	41087	Log Fault Voltages	EVT[DSP]	Normal	Instantaneous values at the moment of trip signal. Data 1: **Pole 1 Voltage** Data1 Type: PoleVoltage Data 2: **Pole 2 Voltage** Data2 Type: PoleVoltage Data 3: **Pole 3 Voltage** Data3 Type: PoleVoltage
A080	41088	Directional Element Fault on X off	PRO[DSP]	Normal	Data 1: **Zero sequence trace info** Data1 Type: zs_traceInfo

					Data 2: **Negative sequence trace info.** Data2 Type: ns_traceInfo Data 3: **Phase trace info** Data3 Type: phase_traceInfo Data 4: **Auxilary data of the DE algorithm workflow** Data4 Type: DEauxData
A081	41089	Close Authorized	PRO[DSP]	Normal	Synch check succeeded. Data 1: **Maximun Voltage Difference in Volts** Data1 Type: PoleVoltage Data 2: **Maximun Angle Difference in degrees** Data2 Type: AngleDiff Data 3: **Side X and Y Frequency Difference in Hz** Data3 Type: DriverValueFrequency
A082	41090	Close Inhibited	PRO[DSP]	Normal	Synch check blocked close. Data 1: **Maximun Voltage Difference in Volts** Data1 Type: PoleVoltage Data 2: **Maximun Angle Difference in degrees** Data2 Type: AngleDiff Data 3: **Side X and Y Frequency Difference in Hz** Data3 Type: DriverValueFrequency
A083	41091	Sectionalizer Not in LOV State	EVT[DSP]	Normal	Data 1: **LOV Counter** Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: **Sectionalizer State** Data4 Type: SectState
A084	41092	Sectionalizer in LOV State	EVT[DSP]	Normal	Data 1: **LOV Counter** Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: **Sectionalizer State** Data4 Type: SectState
A085	41093	Sectionalizer in Fault State	EVT[DSP]	Normal	Data 1: **LOV Counter** Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: **Sectionalizer State** Data4 Type: SectState
A086	41094	Sectionalizer in Tripped State	EVT[DSP]	Normal	Data 1: **LOV Counter** Data1 Type: ushort Data 2: Data2 Type: TripReason Data 3: Data3 Type: ushort Data 4: **Sectionalizer State** Data4 Type: SectState
A087	41095	Sectionalizer in First LOV State	PRO[DSP]	Normal	Data 1: **LOV Counter** Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: **Sectionalizer State** Data4 Type: SectState
A088	41096	Sectionalizer in OC Timing State	EVT[DSP]	Normal	
A089	41097	Sectionalizer in UV Timing State	EVT[DSP]	Normal	
A08A	41098	Sectionalizer in OC Reset State	EVT[DSP]	Normal	
A08B	41099	Voltage Source Loss of Energy Trip	EVT[DSP]	Normal	Loss of control energy led to IR trip.

A08C	41100	Voltage Source Loss of Energy Reset	PRO[DSP]	Normal	Return of control energy.
A08D	41101	NTD Trip Activation State	EVT[DSP]	Extended	Description needed for this event. Data 1: **1 second average of positive sequence voltage** Data1 Type: ushort Data 2: **Negative sequence reference voltage** Data2 Type: ushort Data 3: **Negative sequence voltage** Data3 Type: ushort
A08E	41102	NTD Trip Inhibition State	EVT[DSP]	Extended	Description needed for this event. Data 1: **1 second average of positive sequence voltage** Data1 Type: ushort Data 2: **Negative sequence reference voltage** Data2 Type: ushort Data 3: **Negative sequence voltage** Data3 Type: ushort
A08F	41103	GTD Trip Activation State	EVT[DSP]	Extended	Data 1: **1 second average of positive sequence voltage** Data1 Type: ushort Data 2: **Residual ground reference voltage** Data2 Type: ushort Data 3: **Residual ground voltage** Data3 Type: ushort
A090	41104	GTD Trip Inhibit State	PRO[DSP]	Extended	Data 1: **1 second average of positive sequence voltage** Data1 Type: ushort Data 2: **Residual ground reference voltage** Data2 Type: ushort Data 3: **Residual ground voltage** Data3 Type: ushort
A091	41105	Directional Element Enabled	PRO[DSP]	Normal	Overcurrent elements are under fault directional supervision.
A092	41106	Directional Element Disabled	PRO[DSP]	Normal	No directional supervision for the overcurrent elements exists.
A093	41107	Sequence Coordination Waiting State	PRO[DSP]	Normal	The Sequence Coordination element is in Waiting State.
A094	41108	Initial Settings Group State	PRO[DSP]	Normal	The Sequence Coordination element is in Initial Settings Group State.
A095	41109	Sequence Coordination Shift State	PRO[DSP]	Normal	Request to move to slower TCC curves generated by the Sequence Coordination element. Data 1: Data1 Type: ShiftType Data 2: Data2 Type: ShiftState Data 3: Data3 Type: ATXState
A096	41110	Good Source Detected	PRO[DSP]	Normal	Universal voltage element asserted. Data 3: **Positive sequence (Voltage)** Data3 Type: DriverValueVoltage
A097	41111	Good Source Not Detected	PRO[DSP]	Normal	Universal voltage element reset. Data 3: **Positive sequence (Voltage)** Data3 Type: DriverValueVoltage
A098	41112	Directional Element Inactive	PRO[DSP]	Normal	Directional Element is suspended because switch is fully open. Data 1: **Side which is currently used as a source side.** Data1 Type: good_sourceRelayArg Data 2: **System voltage used by the Directional Element for torque calculation. This can be line voltage or memory voltage.** Data2 Type: ushort

A099	41113	SEFTD Trip Activation State	PRO[DSP]	Extended	Data 1: **1 second average of positive sequence voltage** Data1 Type: ushort Data 2: **Residual ground reference voltage** Data2 Type: ushort Data 3: **Residual ground voltage** Data3 Type: ushort
A09A	41114	SEFTD Trip Inhibition State	PRO[DSP]	Extended	Data 1: **1 second average of positive sequence voltage** Data1 Type: ushort Data 2: **Residual ground reference voltage** Data2 Type: ushort Data 3: **Residual ground voltage** Data3 Type: ushort
A09B	41115	Overcurrent Timing On	PRO[DSP]	Normal	There is an overcurrent element in timing state.
A09C	41116	Overcurrent Timing Off	PRO[DSP]	Normal	None of overcurrent elements are in timing state.
A09D	41117	Voltage Timing On	PRO[DSP]	Normal	There is a voltage element in timing state.
A09E	41118	Voltage Timing Off	PRO[DSP]	Normal	None of voltage elements are in timing state.
A09F	41119	Frequency Timing On	PRO[DSP]	Normal	There is a frequency element in timing state.
A0A0	41120	Frequency Timing Off	EVT[DSP]	Normal	None of a frequency elements are in timing state.
A0A1	41121	Sectionalizer Timing On	EVT[DSP]	Normal	The Sectionalizing Element is in timing state.
A0A2	41122	Sectionalizer Timing Off	EVT[DSP]	Normal	The Sectionalizing Element is not in timing state.
A0A3	41123	Source is on terminal X	PRO[DSP]	Normal	Voltage Trip elements are driven by side X sensors. Data 1: **Positive Sequence Voltage on side X** Data1 Type: ushort Data 2: **Positive Sequence Voltage on side Y** Data2 Type: ushort
A0A4	41124	Source is on terminal Y	PRO[DSP]	Normal	Voltage Trip elements are driven by side Y sensors. Data 1: **Positive Sequence Voltage on side X** Data1 Type: ushort Data 2: **Positive Sequence Voltage on side Y** Data2 Type: ushort
A0A5	41125	Control Energy Not Available	ATX[DSP]	Normal	Control has no energy to perform requested operation.
A0A6	41126	Control Energy Available	ATX[DSP]	Normal	Control has enough energy to perform requested operation.
A0A7	41127	Pole1 2mm Gap High	IMS[DSP]	Normal	Pole1 2mm Gap High.
A0A8	41128	Pole2 2mm Gap High	IMS[DSP]	Normal	Pole2 2mm Gap High.
A0A9	41129	Pole3 2mm Gap High	IMS[DSP]	Normal	Pole3 2mm Gap High.
A0AA	41130	Pole1 2mm Gap Check	IMS[DSP]	Normal	Pole1 2mm Gap Check.
A0AB	41131	Pole2 2mm Gap Check	IMS[DSP]	Normal	Pole2 2mm Gap Check.
A0AC	41132	Pole3 2mm Gap Check	IMS[DSP]	Normal	Pole3 2mm Gap Check.
A0AD	41133	SEF current pulse detected	PRO[DSP]	Normal	SEF current pulse detected. Data 1: **Accumulated number of pulses** Data1 Type: ushort
A0AE	41134	SEF Pulse counter window begin	PRO[DSP]	Normal	Indicates start of rolling window of Time Period duration. The Time Period is a constant rolling window so if no current spikes

					occur within the user-specified Time Period then the current spike counter element is fully reset.
A0AF	41135	SEF pulse counter trip	PRO[DSP]	Normal	Trip of SEF pulse counter element.
A0B0	41136	Ground Element Tripped	EVT[DSP]	Normal	Ground Element Tripped.
A0B1	41137	Ground Element Not Tripped	EVT[DSP]	Normal	Ground Element Not Tripped.
A0B2	41138	Neg Sequence Element Tripped	EVT[DSP]	Normal	Neg Sequence Element Tripped.
A0B3	41139	Neg Sequence Element Not Tripped	EVT[DSP]	Normal	Neg Sequence Element Not Tripped.
A0B4	41140	Enter Single-Phase Mode	ATX[DSP]	Normal	Single-Phase Switch Operation.
A0B5	41141	Single-Phase Lockout State	EVT[DSP]	Normal	One or More Poles Go to Lockout.
A0B6	41142	Immediate Open State	ATX[DSP]	Normal	One or More Poles Have to Trip.
A0B7	41143	Exec Single Pole Op State	ATX[DSP]	Normal	Execute Test Step.
A0B8	41144	Single Pole Test State	EVT[DSP]	Normal	Process Test Step.
A0B9	41145	Latched Overcurrent Condition Off	ATX[DSP]	Normal	
A0BA	41146	Frequency Not Good	EVT[DSP]	Normal	Under frequency is detected.
A0BB	41147	Frequency Is Good	EVT[DSP]	Normal	Under frequency is not detected
A0BC	41148	Under Frequency Detector Is Reset	EVT[DSP]	Normal	Under Frequency Detector is in Fully Reset State. Data 1: **Terminal** Data1 Type: good_sourceRelayArg Data 2: **Frequency** Data2 Type: DriverValueFrequency
A0BD	41149	Under Frequency Detector Triggered	EVT[DSP]	Normal	Under Frequency Detector is in Triggered State. Data 1: **Terminal** Data1 Type: good_sourceRelayArg Data 2: **Frequency** Data2 Type: DriverValueFrequency
A0BE	41150	IFS Elements Unblocked By Coord	EVT[DSP]	Normal	IFS Elements are not blocked by Sequence Coordination logic. Data 1: **Terminal on which the IFS elements are unblocked** Data1 Type: ifs_coordRelayArg
A0BF	41151	IFS Elements Blocked By Coord	EVT[DSP]	Normal	IFS Elements blocked by Sequence Coordination logic. Data 1: **Terminal on which the IFS elements are blocked** Data1 Type: ifs_coordRelayArg
A0C0	41152	Definite Time Element Tripped	EVT[DSP]	Normal	Definite Time Element Tripped.
A0C1	41153	Definite Time Elmnt Not Tripped	EVT[DSP]	Normal	Definite Time Element Not Tripped.
A0C2	41154	1-phase test sequence bypassed	ATX[DSP]	Normal	1-phase lockout forbidden in presence of one locked out pole.
A0C3	41155	3-phase trip - multiple faults	EVT[DSP]	Normal	1-phase trip converted to 3-phase for multiple faults.
A0C4	41156	Backfeed vanished - op resumed	EVT[DSP]	Normal	Backfeed is no longer present on one or more poles. Pulse test resumed. Data 1: Data1 Type: PoleMask

A0C5	41157	1-phase open treated as 3-phase	ATX[DSP]	Normal	If single pole lockout is forbidden or in HLT.
A0C6	41158	Illegal Command	ATX[DSP]	Normal	Data 1: **COmmand Code** Data1 Type: ushort Data 2: **arg1** Data2 Type: ushort Data 3: **arg2** Data3 Type: ushort Data 4: **arg3** Data4 Type: ushort
A0C7	41159	PRO Significant Error	PRO[DSP]	Normal	
A0C8	41160	Src volt. restored - oper. resumed	EVT[DSP]	Normal	There is enough voltage on one or more poles to continue suspended test operation. Data 1: **List of poles that have a viable voltage** Data1 Type: PoleMask
A0C9	41161	Close Complete	IMS[DSP]	Normal	Data 1: **Pole Name** Data1 Type: PoleName
A0CA	41162	Start of Close	IMS[DSP]	Normal	Data 1: **Pole Name** Data1 Type: PoleName
A0CB	41163	Start of Pulse	EVT[DSP]	Normal	Data 1: **Pole Name** Data1 Type: PoleName
A0CC	41164	Start of Open	IMS[DSP]	Normal	Data 1: **Pole Name** Data1 Type: PoleName
A0CD	41165	Operation interrupted	IMS[DSP]	Normal	
A0CE	41166	Pulse Complete	EVT[DSP]	Normal	Data 1: **Pole Name** Data1 Type: PoleName
A0CF	41167	Pulsing Disabled - No Contact Touch	IMS[DSP]	Normal	No contact touch for two consecutive PulseClosing operations.
A0D0	41168	Three poles are closed	IMS[DSP]	Normal	Data 1:HR Timer Data1 Type: short
A0D1	41169	Three poles are open	IMS[DSP]	Normal	
A0D2	41170	Actuator Travel Complete	IMS[DSP]	Normal	Data 1: **Pole Name** Data1 Type: PoleName
A0D3	41171	Pole Still Faulted	EVT[DSP]	Normal	Data 1: **Pole Name** Data1 Type: PoleName
A0D4	41172	Inverse Pulsing Faulted Pole	EVT[DSP]	Normal	Data 1: **Pole Name** Data1 Type: PoleName
A0D5	41173	Invalid Pulse	IMS[DSP]	Normal	Data 1: **Pole Name** Data1 Type: PoleName
A0D6	41174	Request DFT	IMS[DSP]	Normal	Data 1: **Pole Name** Data1 Type: PoleName
A0D7	41175	Warning - Excessive Bounce On	IMS[DSP]	Normal	Excessive bounce during Pulsing.

A0D8	41176	Warning - Excessive Bounce Off	IMS[DSP]	Normal	Not excessive bounce during Pulsing.
A0D9	41177	Two poles are open	IMS[DSP]	Normal	Data 1:HR Timer Data1 Type: short Data 2: **Pole Name** Data2 Type: PoleName Data 3: **Pole Name** Data3 Type: PoleName
A0DA	41178	Warning. 2ndary Plunger Not Opening	IMS[DSP]	Normal	Secondary Plunger does not open during PulseClosing operation.
A0DB	41179	Pulsing Disabd - No Encoder Output	IMS[DSP]	Normal	During Pulse encoder output too low.
A0DC	41180	Pulsing Disabd. No Encoder Reset On	IMS[DSP]	Normal	Encoder does not reset to 0 counts prior to a Pulse or Close operation.
A0DD	41181	Pulsing Disabd. No Cntct Touch OFF	IMS[DSP]	Normal	Contact touch for PulseClosing operation. Data 1: **Pole Name** Data1 Type: PoleName
A0DE	41182	Contact Touch Angle Out of Bounds	IMS[DSP]	Normal	This event is logged if the time difference between the expected contact touch and actual contact touch exceeds 2 ms. Data feild 1 is the pole that this event was recorded on. Data feild 2 is the expected number of ticks to contact touch. Data feild number 3 is the actual number of ticks to contact touch. One tick in time is 1/(system frequency* 128). For a 50Hz system a tick is 0.15625ms. For a 60Hz system a tick is 0.1302ms. To calculate the Point on Wave error in electrical degrees take the absolute value of the difference between the actual and the expected multiplied by the quantity 360 degress divided by 128 samples per cycle. Example: POW error (degrees) = |(Actual-Expected)| * (360/128) Data 1: **Pole** Data1 Type: PoleName Data 2: **Expected** Data2 Type: RAW Data 3: **Actual** Data3 Type: RAW
A0DF	41183	Pole Close Time	IMS[DSP]	Normal	Data 1: **Expected** Data1 Type: RAW Data 2: **Actual** Data2 Type: RAW
A0E0	41184	Pole Pulse Time	IMS[DSP]	Normal	Data 1: **Pole** Data1 Type: PoleName Data 2: **Expected** Data2 Type: RAW Data 3: **Actual** Data3 Type: RAW Data 4: **maxEncoder-minEncoder-stableClose** Data4 Type: ushort
A0E1	41185	Receive DFT	IMS[DSP]	Normal	Data 1: **Raw phase LSW** Data1 Type: RAW Data 2: **Raw phase MSW** Data2 Type: RAW
A0E2	41186	Close-Open Time Out of Bound	IMS[DSP]	Normal	Data 1: Data1 Type: PoleName
A0E3	41187	Phase Loss Detected	PRO[DSP]	Normal	Data 1: **Relay Instance** Data1 Type: ATXPLIInstanceType Data 2: **Zero Sequence Voltage** Data2 Type: ushort
A0E4	41188	Pulsing Disabd. Pulse Out of Range	IMS[DSP]	Normal	Contact touch during 3 consecutive Pulse operations out of range. Data 1: Data1 Type: PoleName

A0E5	41189	Secondary Mech Reset Test Complete	IMS[DSP]	Normal	Data 1: Data1 Type: PoleName
A0E6	41190	Operation Restart During Reset	IMS[DSP]	Normal	
A0E7	41191	Error - Close Position Out of Range	IMS[DSP]	Normal	Stable close position measured out of range.
A0E8	41192	Error - Position Incorrect ON	IMS[DSP]	Normal	Pole does not end up in the correct position after operation (i.e. if closed ends up open or if opened ends up closed).
A0E9	41193	Alarm - Excessive Overtravel Off	IMS[DSP]	Normal	Overtravel during operation is ok.
A0EA	41194	IMS/ACW ISR Interleave Mismatch	IMS[DSP]	Normal	
A0EB	41195	IMS ISR Excess Duration	IMS[DSP]	Normal	
A0EC	41196	IMS/PNG Wrong Touch Reported	IMS[DSP]	Normal	
A0ED	41197	IMS/BMM Save Request	IMS[DSP]	Normal	
A0EE	41198	IMS/BMM New Copy Loaded	IMS[DSP]	Normal	
A0EF	41199	IMS/BMM Status Update	IMS[DSP]	Normal	
A0F0	41200	Primary State Now	IMS[DSP]	Normal	Data 1: Data1 Type: PoleName Data 2: Data2 Type: IMSPriState Data 3: **IMS counter** Data3 Type: RAW
A0F1	41201	Execute 2ndary latching operation	IMS[DSP]	Normal	Data 1: Data1 Type: PoleName Data 2: **counter** Data2 Type: RAW
A0F2	41202	Warn: 2ndary Plunger NotOpeningOFF	IMS[DSP]	Normal	Secondary Plunger does open during PulseClosing operation.
A0F3	41203	Bad Voltage Sensor On	IMS[DSP]	Normal	Bad Voltage Sensor Detected
A0F4	41204	Bad Voltage Sensor Off	IMS[DSP]	Normal	Bad Voltage Sensor Cleared
A0F5	41205	IMS Incident Logger	IMS[DSP]	Normal	Data 1: **Incident Id** Data1 Type: IMSIncidentName Data 2: **Pole** Data2 Type: PoleName Data 3: **Misc. Data** Data3 Type: ushort Data 4: **Count** Data4 Type: ushort
A0F6	41206	Pulsing Disabd. Touch OutofRange On	IMS[DSP]	Normal	Contact touch during 3 consecutive Close operations out of range.
A0F7	41207	Pulsing Disabd. Cls OutofRange Off	IMS[DSP]	Normal	Contact touch during Close operation ok.
A0FA	41210	Pole travel below limit OFF	IMS[DSP]	Normal	Stable close position measured in range.
A0FB	41211	Pulse Analysis Complete	EVT[DSP]	Normal	Data 1: **Pole Name** Data1 Type: PoleName

					Data 2: **Analysis result** Data2 Type: PNGAnalysisResult Data 3:Analysis result details Data3 Type: ushort
A0FC	41212	Pulse Analysis Data	EVT[DSP]	Normal	Data 1: **Predicted feeder current in Amps** Data1 Type: PNGPredictedFeederCurrent Data 2: **Pulse closing angle per unit** Data2 Type: PNGPulseAngle
A0FD	41213	Error - Position Incorrect OFF	IMS[DSP]	Normal	Pole does end up in the correct position after operation (i.e. if closed ends up close or if open ends up open).
A0FE	41214	Pulsing Disabd. Pulse OutofRangeOff	IMS[DSP]	Normal	Contact touch during Pulse operation in range.
A0FF	41215	Directional Element Fault on Y off	PRO[DSP]	Normal	Data 1: **Zero sequence trace info** Data1 Type: Hexushort Data 2: **Negative sequence trace info.** Data2 Type: ns_traceInfo Data 3: **Phase trace info** Data3 Type: phase_traceInfo Data 4: **Auxilary data of the DE algorithm workflow** Data4 Type: DEauxData
A100	41216	Coord Curve Shift Direction Y	ATX[DSP]	Normal	External command or sequence coordination element requested a shift
A101	41217	Coordination Curve Shift Dir Y off	ATX[DSP]	Normal	External command or reset timer forced initial trip settings
A102	41218	Pulsing Enabled - Encoder Output	IMS[DSP]	Normal	During Pulse encoder output ok.
A103	41219	Pulsing Disabd. NoEncoderReset Off	IMS[DSP]	Normal	Encoder does reset to 0 counts prior to a Pulse or Close operation.
A104	41220	Phase Loss Not Detected	PRO[DSP]	Normal	Data 1: **Relay Instance** Data1 Type: ATXPLIInstanceType Data 2: **Zero sequence or negative sequence voltage in Volts** Data2 Type: ushort
A105	41221	Insuff. energy during operation on	IMS[DSP]	Normal	Unexpected insufficient energy during an operation.
A106	41222	Insuff. energy during operation off	IMS[DSP]	Normal	No unexpected insufficient energy during an operation.
A107	41223	Error - Main Coil Current ON	IMS[DSP]	Normal	Unsuccessful coil test.
A108	41224	Error - Main Coil Current OFF	IMS[DSP]	Normal	Successful coil test.
A109	41225	Remaining Contact Wear Low On	IMS[DSP]	Normal	Remaining Contact Wear Low.
A10A	41226	Remaining Contact Wear Low Off	IMS[DSP]	Normal	Remaining Contact Wear Ok.
A10E	41230	Pole 1 Closed	EVT[DSP]	Normal	
A10F	41231	Pole 1 Closed OFF	IMS[DSP]	Normal	
A110	41232	Pole 2 Closed	EVT[DSP]	Normal	
A111	41233	Pole 2 Closed OFF	IMS[DSP]	Normal	
A112	41234	Pole 3 Closed	EVT[DSP]	Normal	
A113	41235	Pole 3 Closed OFF	IMS[DSP]	Normal	
A114	41236	Pole 1 Open	EVT[DSP]	Normal	
A115	41237	Pole 1 Open OFF	IMS[DSP]	Normal	
A116	41238	Pole 2 Open	EVT[DSP]	Normal	
A117	41239	Pole 2 Open OFF	IMS[DSP]	Normal	

A118	41240	Pole 3 Open	EVT[DSP]	Normal	
A119	41241	Pole 3 Open OFF	IMS[DSP]	Normal	
A11A	41242	IntelliRupter Closed	IMS[DSP]	Normal	
A11B	41243	IntelliRupter Closed OFF	IMS[DSP]	Normal	
A11C	41244	IntelliRupter Open	IMS[DSP]	Normal	
A11D	41245	IntelliRupter Open OFF	IMS[DSP]	Normal	
A11E	41246	Mechanism Error	IMS[DSP]	Normal	Rollup point for any mechanism error active.
A11F	41247	Mechanism Error OFF	IMS[DSP]	Normal	No mechanism error active.
A120	41248	Mechanism Alarm ON	IMS[DSP]	Normal	Rollup point for any mechanism alarm active.
A121	41249	Mechanism Alarm OFF	IMS[DSP]	Normal	No mechanism alarm active.
A122	41250	Mechanism Warning ON	IMS[DSP]	Normal	Rollup point for any mechanism warning active.
A123	41251	Mechanism Warning OFF	IMS[DSP]	Normal	No mechanism warning active..
A124	41252	Bad Voltage Sensor Information	IMS[DSP]	Normal	Bad Voltage Sensor Information. Data 1: **Pole** Data1 Type: PoleName Data 2: **Bad Sensor Index** Data2 Type: BadSensorIndex Data 3: **X Side Voltage** Data3 Type: ushort Data 4: **Y Side Voltage** Data4 Type: ushort
A127	41255	Alarm - Excessive Overtravel On	IMS[DSP]	Normal	Overtravel during operation is too large.
A128	41256	Warning Current Prof. incorrect ON	IMS[DSP]	Normal	Current Profile points out of Range.
A129	41257	Warning Current Prof. incorrect OFF	IMS[DSP]	Normal	Current Profile points not out of Range.
A12B	41259	Latched Overcurrent Condition On	ATX[DSP]	Normal	
A12D	41261	Integrated Pwr Module State Changed	IPM[DSP]	Normal	Data 1: **New IPM State** Data1 Type: IPMState Data 2: **Old IPM State** Data2 Type: IPMState
A12E	41262	Main Capacitor Bank Low Voltage	IPM[DSP]	Normal	Main capacitor bank voltage is low. Data 1: **Main bank voltage in Volts** Data1 Type: ushort
A12F	41263	Main Capacitor Bank Normal Voltage	IPM[DSP]	Normal	Main capacitor bank voltage is normal. Data 1: **Main bank voltage in Volts** Data1 Type: ushort
A130	41264	Slow Capacitor Charge	IPM[DSP]	Normal	Capacitor charging too slow. Data 1: **Main bank voltage in Volts** Data1 Type: ushort Data 2: **Secondary bank voltage in Volts** Data2 Type: ushort
A131	41265	Normal Capacitor Charge	IPM[DSP]	Normal	Capacitor charging at normal rate. Data 1: **Main bank voltage in Volts** Data1 Type: ushort Data 2: **Secondary bank voltage in Volts** Data2 Type: ushort
A132	41266	Slow Capacitor Charge Rate	IPM[DSP]	Normal	Data 1: **Charge Rate in Volts/10s** Data1 Type: ushort Data 2: **Alarm counter** Data2 Type: ushort

					Data 3: **Capacitor Bank** Data3 Type: CapBank Data 4: **Capacitor Bank Voltage** Data4 Type: ushort
A133	41267	Capacitors Not Charging	IPM[DSP]	Normal	Data 1: **Capacitor Bank** Data1 Type: CapBank Data 2: **Charge rate in V/10ses** Data2 Type: ushort
A134	41268	Cap Bank Interconnection Issue	IPM[DSP]	All	Main and secondary capacitor bank isolating diodes are shorted. Data 1: **Main bank voltage in Volts** Data1 Type: ushort Data 2: **Secondary bank voltage in Volts** Data2 Type: ushort
A135	41269	Unequal Capacitor Bank Voltages	IPM[DSP]	Normal	Main and secondary capacitor bank isolating diodes are open. Data 1: **Main bank voltage in Volts** Data1 Type: ushort Data 2: **Secondary bank voltage in Volts** Data2 Type: ushort
A136	41270	Equal Capacitor Bank Voltages	IPM[DSP]	Normal	Main and secondary capacitor bank isolating diodes are not open. Data 1: **Main bank voltage in Volts** Data1 Type: ushort Data 2: **Secondary bank voltage in Volts** Data2 Type: ushort
A137	41271	Capac. Charge Disabd warning set	IPM[DSP]	Normal	Capacitor charging has been disabled.
A138	41272	Capacitor charge disabled alarm set	IPM[DSP]	Normal	Capacitors are not charging correctly. Data 1: **Main bank voltage in Volts** Data1 Type: ushort Data 2: **Secondary bank voltage in Volts** Data2 Type: ushort
A139	41273	Main Capacitor Charge ON	IPM[DSP]	Normal	Data 1: **Main bank voltage in Volts** Data1 Type: ushort Data 2: **Secondary bank voltage in Volts** Data2 Type: ushort
A13A	41274	Main Capacitor Charge OFF	IPM[DSP]	Normal	Data 1: **Main bank voltage in Volts** Data1 Type: ushort Data 2: **Secondary bank voltage in Volts** Data2 Type: ushort
A13B	41275	Loss of Control Power	IPM[DSP]	Normal	
A13C	41276	Primary Temperature Sensor Issue	IPM[DSP]	All	Temperature sensor output is out of range. Data 1: **Primary sensor temperature in degrees** Data1 Type: ushort Data 2: **Secondary sensor temperature in degrees** Data2 Type: ushort
A13D	41277	Primary Temperature Sensor OK	IPM[DSP]	Normal	Temperature sensor output is not out of range. Data 1: **Primary sensor temperature in degrees** Data1 Type: ushort Data 2: **Secondary sensor temperature in degrees** Data2 Type: ushort
A13E	41278	Secondary Temperature Sensor Issue	IPM[DSP]	All	Temperature sensor output is out of range. Data 1: **Primary sensor temperature in degrees** Data1 Type: ushort Data 2: **Secondary sensor temperature in degrees** Data2 Type: ushort
A13F	41279	Secondary Temperature Sensor OK	IPM[DSP]	Normal	Temperature sensor output is not out of range. Data 1: **Primary sensor temperature in degrees** Data1 Type: ushort Data 2: **Secondary sensor temperature in degrees** Data2 Type: ushort

A140	41280	Energy Budget Details	IPM[DSP]	Normal	Data 1: **Requested energy in Joules** Data1 Type: ushort Data 2: **Available energy in Joules** Data2 Type: ushort Data 3: **Main bank voltage in Volts** Data3 Type: CapVoltage Data 4: **Secondary bank voltage in Volts** Data4 Type: CapVoltage
A141	41281	Bank Capacitance Recalculated	IPM[DSP]	Normal	Data 1: **Main bank capacitance in uF** Data1 Type: ushort Data 2: **Secondary bank capacitance in uF** Data2 Type: ushort Data 3: **Directly calculated main bank capacitance in uF** Data3 Type: ushort Data 4: **Cap bank temperature used for capacitance compensation in °C** Data4 Type: ushort
A142	41282	Energy Storage Capacity Below 50%	IPM[DSP]	Normal	Energy storage capacity has dropped below 50% of its nominal value. Data 1: **Calculated Main bank capacitance in uF** Data1 Type: ushort Data 2: **Calculated Secondary bank capacitance in uF** Data2 Type: ushort Data 3: **Initial Main bank capacitance in uF** Data3 Type: ushort Data 4: **Initial Secondary bank capacitance in uF** Data4 Type: ushort
A143	41283	Energy Storage Capacity Below 80%	IPM[DSP]	Normal	Energy storage capacity has dropped below 80% of its nominal value. Data 1: **Calculated Main bank capacitance in uF** Data1 Type: ushort Data 2: **Calculated Secondary bank capacitance in uF** Data2 Type: ushort Data 3: **Initial Main bank capacitance in uF** Data3 Type: ushort Data 4: **Initial Secondary bank capacitance in uF** Data4 Type: ushort
A144	41284	Energy Storage Capacity Above 50%	IPM[DSP]	Normal	Energy storage capacity has not dropped below 50% of its nominal value. Data 1: **Calculated Main bank capacitance in uF** Data1 Type: ushort Data 2: **Calculated Secondary bank capacitance in uF** Data2 Type: ushort Data 3: **Initial Main bank capacitance in uF** Data3 Type: ushort Data 4: **Initial Secondary bank capacitance in uF** Data4 Type: ushort
A145	41285	Energy Storage Capacity Above 80%	IPM[DSP]	Normal	Energy storage capacity has not dropped below 80% of its nominal value. Data 1: **Calculated Main bank capacitance in uF** Data1 Type: ushort Data 2: **Calculated Secondary bank capacitance in uF** Data2 Type: ushort Data 3: **Initial Main bank capacitance in uF** Data3 Type: ushort Data 4: **Initial Secondary bank capacitance in uF** Data4 Type: ushort
A146	41286	Capac Charge Disabd warning cleared	IPM[DSP]	Normal	Capacitor charging has not been disabled. Data 1: **Main bank voltage in Volts** Data1 Type: ushort Data 2: **Secondary bank voltage in Volts** Data2 Type: ushort

A147	41287	Operation Prohibited	IPM[DSP]	Extended	Data 1: **Main Cap Capacity uF** Data1 Type: ushort Data 2: **Secondary Cap Capacity uF** Data2 Type: ushort
A148	41288	Command Suspended	ATX[DSP]	Normal	Data 1: **Command Code** Data1 Type: CommandCode Data 2: **ATX State** Data2 Type: ATXState
A149	41289	Pending Command Activated	ATX[DSP]	Normal	Data 1: **Command Code** Data1 Type: CommandCode
A14A	41290	ATX Control Timer Started	ATX[DSP]	Extended	Data 1: **ATX COntrol Timer** Data1 Type: ATXTimer Data 2: **ATX State** Data2 Type: ATXState
A14B	41291	ATX Control Timer Expired	ATX[DSP]	Extended	Data 1: **ATX COntrol Timer** Data1 Type: ATXTimer Data 2: **ATX State** Data2 Type: ATXState
A14C	41292	Control Unlatched-EmergencyShutdown	ATX[DSP]	Normal	
A14D	41293	Source Lost in Test Sequence	EVT[DSP]	Normal	Data 1: **Positive Sequence Voltage X** Data1 Type: DriverValueVoltage Data 2: **Positive Sequence Voltage Y** Data2 Type: DriverValueVoltage Data 3: **Voltage Threshold** Data3 Type: DriverValueVoltage
A14E	41294	BackFeed Still Present	EVT[DSP]	Normal	
A14F	41295	Abort Sequence Coord due to Trip	ATX[DSP]	Normal	
A150	41296	Last Recorded Position Is	ATX[DSP]	Normal	Data 1: **IR State** Data1 Type: IRPosition Data 2: **Status of last IMS operation** Data2 Type: IMScompletion Data 3: **List of closed poles** Data3 Type: PoleMask
A151	41297	Pulse Nonfunctional - Open	ATX[DSP]	Normal	
A152	41298	2nd Closing Prof Chosen by a Lever	EVT[DSP]	Normal	
A153	41299	Waiting for secondary cap voltage	ATX[DSP]	Normal	
A154	41300	Capacitor Bank Interconnection OK	IPM[DSP]	All	Main and secondary capacitor bank isolating diodes are not shorted. Data 1: **Main bank voltage in Volts** Data1 Type: ushort Data 2: **Secondary bank voltage in Volts** Data2 Type: ushort
A155	41301	Capac. charge disabd alarm cleared	IPM[DSP]	All	Capacitors are charging correctly. Data 1: **Main bank voltage in Volts** Data1 Type: ushort Data 2: **Secondary bank voltage in Volts** Data2 Type: ushort
A156	41302	Shutdown Sequencing Error Set	IPM[DSP]	All	Error during power down sequencing.
A157	41303	SEEPROM Issue Cleared	ATX[DSP]	All	No more problems with serial EEPROM operations.

					Data 1: **Error Source** Data1 Type: SEEPErrorCode
A158	41304	Comm Proc Handshake Issue	ATX[DSP]	Normal	MCU did not issue a command in time. Restricted protection mode started.
A159	41305	Comm Proc Handshake Success	ATX[DSP]	Normal	Handshake completed - ATXRun command received by DSP in time.
A15A	41306	Control Power Out Time Determined	ATX[DSP]	Normal	The time when the DSP processor stopped could be determined.
A15B	41307	Cap Charging Error Set	IPM[DSP]	All	One of the capacitor banks is not charging.
A15C	41308	Cap Charging Error Cleared	IPM[DSP]	All	Capacitor bank charging is OK.
A15D	41309	Shutdown Sequencing Error Cleared	IPM[DSP]	All	No error during power down sequencing.
A15E	41310	Waveform Capture Initialized	WFC[DSP]	Extended	
A15F	41311	WFC Pre-Event Filled	WFC[DSP]	Extended	
A160	41312	Waveform Capture Triggered	WFC[DSP]	Normal	Data 1: **WFC Trigger** Data1 Type: WFCTrigger Data 2: **Trigger Instance** Data2 Type: WFCTriggerInstance
A161	41313	Waveform Capture Secondary Trigger	WFC[DSP]	Normal	Data 1: **WFC Trigger** Data1 Type: WFCTrigger Data 2: **Trigger Instance** Data2 Type: WFCTriggerInstance
A162	41314	Primary Capture Started	WFC[DSP]	Extended	
A163	41315	Waveform Capture Frozen	WFC[DSP]	Normal	
A164	41316	Waveform Capture Unfrozen	WFC[DSP]	Normal	
A165	41317	Trigger Ignored: WFC Frozen	WFC[DSP]	Normal	
A166	41318	Secondary Capture Started	WFC[DSP]	Extended	
A167	41319	Trigger Ignored: Insufficient space	WFC[DSP]	Extended	
A168	41320	Executed operations	IPM[DSP]	Normal	Number and types of mechanism operations that have been actually executed. Data 1: **Number of open operations** Data1 Type: ushort Data 2: **Number of close operations** Data2 Type: ushort Data 3: **Number of pulse operations** Data3 Type: ushort Data 4: **Number of secondary resets** Data4 Type: ushort
A169	41321	Requested operations	IPM[DSP]	Normal	Number and types of mechanism operations that IMS has requested energy for. Data 1: **Number of open operations** Data1 Type: ushort Data 2: **Number of close operations** Data2 Type: ushort Data 3: **Number of pulse operations** Data3 Type: ushort Data 4: **Number of secondary resets** Data4 Type: ushort
A16A	41322	Capacitors Voltage Change	IPM[DSP]	Normal	Capacitor voltages drop due to mechanism operation. Data 1: **Main cap bank voltage before the operation** Data1 Type: CapVoltage

					Data 2: **Secondary cap bank voltage before the operation** Data2 Type: CapVoltage Data 3: **Main cap bank voltage after the operation** Data3 Type: CapVoltage Data 4: **Total measured capacity in uF** Data4 Type: ushort
A16B	41323	Op Prohibited - Secondary low	IPM[DSP]	Normal	Data 1: **Main cap bank voltage in Volts** Data1 Type: CapVoltage Data 2: **Main cap bank voltage in Volts** Data2 Type: CapVoltage
A16C	41324	Pulse Nonfunctional - Block Close	ATX[DSP]	Normal	Pulse Nonfunctional - Block Close.
A16D	41325	Clear Block Close on Pulse Nonfunc	ATX[DSP]	Normal	Clear Block Close (Pulse Nonfunctional).
A16E	41326	Current Restraint-Phase in Effect	EVT[DSP]	Normal	1-Phase operations blocked (Current Restraint-Phase).
A16F	41327	Current Restraint-Phase Off	EVT[DSP]	Normal	1-Phase operations allowed (Current Restraint-Phase).
A170	41328	Current Restraint-Ground in Effect	EVT[DSP]	Normal	1-Phase operations blocked (Current Restraint-Ground).
A171	41329	Current Restraint-Ground Off	EVT[DSP]	Normal	1-Phase operations allowed (Current Restraint-Ground).
A172	41330	IMS STUB: Close1 Fired	ATX[DSP]	Normal	Debug message - should not appear in production. Data 1: **Pole Name** Data1 Type: PoleName
A173	41331	IMS STUB: Open1 Done	ATX[DSP]	Normal	Debug message - should not appear in production. Data 1: **Pole Name** Data1 Type: PoleName
A174	41332	Lockout - Pole 1	EVT[DSP]	Normal	
A175	41333	Lockout - Pole 1 Off	ATX[DSP]	Normal	
A176	41334	Lockout - Pole 2	EVT[DSP]	Normal	
A177	41335	Lockout - Pole 2 Off	ATX[DSP]	Normal	
A178	41336	Lockout - Pole 3	EVT[DSP]	Normal	
A179	41337	Lockout - Pole 3 Off	ATX[DSP]	Normal	
A17A	41338	PNG Fault - Pole 1	ATX[DSP]	Normal	
A17B	41339	PNG Fault - Pole 1 Off	ATX[DSP]	Normal	
A17C	41340	PNG Fault - Pole 2	ATX[DSP]	Normal	
A17D	41341	PNG Fault - Pole 2 Off	ATX[DSP]	Normal	
A17E	41342	PNG Fault - Pole 3	ATX[DSP]	Normal	
A17F	41343	PNG Fault - Pole 3 Off	ATX[DSP]	Normal	
A180	41344	1-Phase Operation Blocked	EVT[DSP]	Normal	
A181	41345	1-Phase Operation Allowed	EVT[DSP]	Normal	
A182	41346	GTB Lever Applied	EVT[DSP]	Normal	Ground Trip Block manual lever is in ON position.
A183	41347	GTB Lever Not Applied	EVT[DSP]	Normal	Ground Trip Block manual lever is in OFF position.
A184	41348	Phase Rotation Change Rejected	ATX[DSP]	Normal	User-defined system rotation can not be accepted. There is no viable voltage on all poles to measure the rotation.
A185	41349	Capacitor Driver Disabled	ATX[DSP]	Normal	

A186	41350	Capacitor Driver Enabled	ATX[DSP]	Normal	
A187	41351	Sleep Time Determination Issue	ATX[DSP]	Normal	Data 1: **New Time Source** Data1 Type: DSPTimeSource Data 2: **Old Time Source** Data2 Type: DSPTimeSource
A188	41352	HLT Lever Position Indeterminate	ATX[DSP]	Normal	
A189	41353	2ndary Cap Still Low-Init Stopped	ATX[DSP]	Normal	Data 1: **Secondary capacitor voltage** Data1 Type: ushort
A18A	41354	Calibration Data Alarm ON	ATX[DSP]	Normal	Either of application board or CCP board calibration data CRC is bad.
A18B	41355	Calibration Data Alarm OFF	ATX[DSP]	Normal	All control calibration data CRC are OK.
A18C	41356	Wrong Sensor Calibration Data CRC	ATX[DSP]	Normal	Sensor calibration data CRC is bad.
A18D	41357	Sensor Calibration Data OK	ATX[DSP]	Normal	Sensor calibration data CRC is okay.
A18E	41358	Emergency Shutdown Started	ATX[DSP]	Normal	
A18F	41359	Control Relatched	ATX[DSP]	Normal	
A190	41360	Error Status Reported	ATX[DSP]	Normal	DSP Error Condition On.
A191	41361	Error Status Cleared	ATX[DSP]	Normal	DSP Error Condition Off.
A192	41362	ATX Error Status Reported	ATX[DSP]	Normal	ATX Error State On.
A193	41363	ATX Error Status Cleared	ATX[DSP]	Normal	ATX Error State Off.
A194	41364	Voltage Present on X	ATX[DSP]	Normal	Voltage is present on side X terminals.
A195	41365	Voltage Not Present on X	ATX[DSP]	Normal	Voltage is not present on side X terminals.
A196	41366	Protection Proc Reset	ATX[DSP]	Normal	DSP Reset.
A197	41367	Prot Proc Reset Cleared	ATX[DSP]	Normal	DSP Reset acknowledged.
A198	41368	Manual Lever Down	EVT[DSP]	Normal	Manual Lever Down.
A199	41369	Manual Lever Up	EVT[DSP]	Normal	Manual Lever Up.
A19A	41370	Current Direction Y->X On	PRO[DSP]	Normal	Current Direction Y->X On.
A19B	41371	Voltage Present on Y	ATX[DSP]	Normal	Voltage is present on side Y terminals.
A19C	41372	Current Direction X->Y On	PRO[DSP]	Normal	Current X->Y Detected.
A19D	41373	Voltage Not Present on Y	ATX[DSP]	Normal	Voltage is not present on side Y terminals.
A19E	41374	ITII Overcurrent Pole 1	PRO[DSP]	Normal	ITII Overcurrent Pole 1.
A19F	41375	ITII Overcurrent Pole 1 Cleared	PRO[DSP]	Normal	ITII Overcurrent Pole 1 Cleared.
A1A0	41376	ITII Overcurrent Pole 2	PRO[DSP]	Normal	ITII Overcurrent Pole 2.
A1A1	41377	ITII Overcurrent Pole 2 Cleared	PRO[DSP]	Normal	ITII Overcurrent Pole 2 Cleared.

A1A2	41378	ITII Overcurrent Pole 3	PRO[DSP]	Normal	ITII Overcurrent Pole 3.
A1A3	41379	ITII Overcurrent Pole 3 Cleared	PRO[DSP]	Normal	ITII Overcurrent Pole 3 Cleared.
A1A4	41380	Ground Trip Blocked	EVT[DSP]	Normal	Ground Trip Blocked.
A1A5	41381	Ground Trip Allowed	EVT[DSP]	Normal	Ground Trip Allowed.
A1A6	41382	Test On Backfeed Blocked	EVT[DSP]	Normal	Test On Backfeed Blocked.
A1A7	41383	Test On Backfeed Allowed	EVT[DSP]	Normal	Test On Backfeed Allowed.
A1A8	41384	Tripped to Lockout	EVT[DSP]	Normal	Tripped to Lockout.
A1A9	41385	Tripped to Lockout Cleared	ATX[DSP]	Normal	Tripped to Lockout Cleared.
A1AA	41386	Fault Cycling Active DSP	EVT[DSP]	Normal	Fault Cycling Active.
A1AB	41387	Fault Cycling Reset DSP	EVT[DSP]	Normal	Fault Cycling Reset.
A1AC	41388	Orderly Shutdown Started	ATX[DSP]	Normal	Imminent Control Power Loss.
A1AD	41389	Orderly Shutdown Cleared	ATX[DSP]	Normal	Control Power OK.
A1AE	41390	WiFi Connected	ATX[DSP]	Normal	WiFi Connected.
A1AF	41391	WiFi Disconnected	ATX[DSP]	Normal	Disconnected.
A1B0	41392	Closed and Quiet	EVT[DSP]	Normal	Closed and Quiet.
A1B1	41393	Closed and Quiet Off	ATX[DSP]	Normal	Not Closed or Quiet.
A1B2	41394	ATX Manual Operation	ATX[DSP]	Normal	ATX Manual Operation.
A1B3	41395	ATX Manual Operation Cleared	ATX[DSP]	Normal	ATX Manual Operation Cleared.
A1B4	41396	Good Source X Voltage	ATX[DSP]	Normal	Good Source X Voltage.
A1B5	41397	Source X Voltage Not Ideal	ATX[DSP]	Normal	Source X Voltage Not Ideal.
A1B6	41398	Good Source Y Voltage	ATX[DSP]	Normal	Good Source Y Voltage.
A1B7	41399	Source Y Voltage Not Ideal	ATX[DSP]	Normal	Source Y Voltage Not Ideal.
A1B8	41400	General Profile 1 Active	EVT[DSP]	Normal	General Profile 1 Active.
A1B9	41401	General Profile 1 Not Active	ATX[DSP]	Normal	General Profile 1 Not Active.
A1BA	41402	General Profile 2 Active	EVT[DSP]	Normal	General Profile 2 Active.
A1BB	41403	General Profile 2 Not Active	ATX[DSP]	Normal	General Profile 2 Not Active.
A1BC	41404	General Profile 3 Active	EVT[DSP]	Normal	General Profile 3 Active.
A1BD	41405	General Profile 3 Not Active	ATX[DSP]	Normal	General Profile 3 Not Active.
A1BE	41406	General Profile 4 Active	EVT[DSP]	Normal	General Profile 4 Active.

A1BF	41407	General Profile 4 Not Active	ATX[DSP]	Normal	General Profile 4 Not Active.
A1C0	41408	Closing Profile 1 Active	EVT[DSP]	Normal	Closing Profile 1 Active.
A1C1	41409	Closing Profile 1 Not Active	ATX[DSP]	Normal	Closing Profile 1 Not Active.
A1C2	41410	Closing Profile 2 Active	EVT[DSP]	Normal	Closing Profile 2 Active.
A1C3	41411	Closing Profile 2 Not Active	ATX[DSP]	Normal	Closing Profile 2 Not Active.
A1C4	41412	SEF Trip Blocked	EVT[DSP]	Normal	SEF Trip Blocked.
A1C5	41413	SEF Trip Allowed	EVT[DSP]	Normal	SEF Trip Allowed.
A1C6	41414	Use 2nd Closing Prof On Next Close	EVT[DSP]	Normal	Use 2nd Closing Profile On Next Close.
A1C7	41415	Use 1st Closing Prof On Next Close	EVT[DSP]	Normal	Use 1st Closing Profile On Next Close.
A1C8	41416	Hot-Line Tag Set by Lever	EVT[DSP]	Normal	Hot-Line Tag Set by Lever.
A1C9	41417	Hot-Line Tag Lever Reset	EVT[DSP]	Normal	Hot-Line Tag Lever Reset.
A1CA	41418	Hot-Line Tag Set by SCADA	EVT[DSP]	Normal	Hot-Line Tag Set by SCADA.
A1CB	41419	Hot-Line Tag Reset by SCADA	EVT[DSP]	Normal	Hot-Line Tag Reset by SCADA.
A1CC	41420	Hot-Line Tag Set by IntelliLink	EVT[DSP]	Normal	Hot-Line Tag Set by IntelliLink
A1CD	41421	Hot-Line Tag Reset by IntelliLink	EVT[DSP]	Normal	Hot-Line Tag Reset by IntelliLink
A1CE	41422	Hot-Line Tag Set by I-Link Remote	EVT[DSP]	Normal	Hot-Line Tag Set by I-Link Remote.
A1CF	41423	Hot-Line Tag Reset by I-Link Remote	EVT[DSP]	Normal	Hot-Line Tag Reset by I-Link Remote.
A1D0	41424	Overcurrent Trip Pole 1	ATX[DSP]	Normal	Overcurrent Trip Pole 1.
A1D1	41425	Overcurrent Trip Pole 1 Cleared	ATX[DSP]	Normal	Overcurrent Trip Pole 1 Cleared.
A1D2	41426	Overcurrent Trip Pole 2	ATX[DSP]	Normal	Overcurrent Trip Pole 2.
A1D3	41427	Overcurrent Trip Pole 2 Cleared	ATX[DSP]	Normal	Overcurrent Trip Pole 2 Cleared.
A1D4	41428	Overcurrent Trip Pole 3	ATX[DSP]	Normal	Overcurrent Trip Pole 3.
A1D5	41429	Overcurrent Trip Pole 3 Cleared	ATX[DSP]	Normal	Overcurrent Trip Pole 3 Cleared.
A1D6	41430	Trip Target Pole 1 X	EVT[DSP]	Normal	Trip Target Pole 1 X.
A1D7	41431	Trip Target Pole 1 X Cleared	ATX[DSP]	Normal	Trip Target Pole 1 X Cleared.
A1D8	41432	Trip Target Pole 2 X	EVT[DSP]	Normal	Trip Target Pole 2 X.
A1D9	41433	Trip Target Pole 2 X Cleared	ATX[DSP]	Normal	Trip Target Pole 2 X Cleared.
A1DA	41434	Trip Target Pole 3 X	EVT[DSP]	Normal	Trip Target Pole 3 X.
A1DB	41435	Trip Target Pole 3 X Cleared	ATX[DSP]	Normal	Trip Target Pole 3 X Cleared.

A1DC	41436	Trip Target Pole 1 Y	EVT[DSP]	Normal	Trip Target Pole 1 Y.
A1DD	41437	Trip Target Pole 1 Y Cleared	ATX[DSP]	Normal	Trip Target Pole 1 Y Cleared.
A1DE	41438	Trip Target Pole 2 Y	EVT[DSP]	Normal	Trip Target Pole 2 Y.
A1DF	41439	Trip Target Pole 2 Y Cleared	ATX[DSP]	Normal	Trip Target Pole 2 Y Cleared.
A1E0	41440	Trip Target Pole 3 Y	EVT[DSP]	Normal	Trip Target Pole 3 Y.
A1E1	41441	Trip Target Pole 3 Y Cleared	ATX[DSP]	Normal	Trip Target Pole 3 Y Cleared.
A1E2	41442	Overcurrent Trip	EVT[DSP]	Normal	Overcurrent Trip.
A1E3	41443	Overcurrent Trip Cleared	ATX[DSP]	Normal	Overcurrent Trip Cleared.
A1E4	41444	Voltage Trip	EVT[DSP]	Normal	Voltage Trip.
A1E5	41445	Voltage Trip Cleared	ATX[DSP]	Normal	Voltage Trip Cleared.
A1E6	41446	Frequency Trip	EVT[DSP]	Normal	Frequency Trip.
A1E7	41447	Frequency Trip Cleared DSP	ATX[DSP]	Normal	Frequency Trip Cleared.
A1E8	41448	Sectionalizer Trip	EVT[DSP]	Normal	Sectionalizer Trip.
A1E9	41449	Sectionalizer Trip Cleared	ATX[DSP]	Normal	Sectionalizer Trip Cleared.
A1EA	41450	Testing Blocked	EVT[DSP]	Normal	Testing Blocked On.
A1EB	41451	Testing Allowed	EVT[DSP]	Normal	Testing Allowed.
A1EC	41452	Alternate Profile Default	ATX[DSP]	Normal	Alternate Profile Default.
A1ED	41453	Normal Profile Default	ATX[DSP]	Normal	Alternate Profile Default Off.
A1EE	41454	Open Command Ignored - Already Open	EVT[DSP]	Normal	
A1EF	41455	Close Cmd Ignored	EVT[DSP]	Normal	Data 1: Data1 Type: CloseCmdIgnoredReason Data 4: Data4 Type: CloseIgnoredCmd
A1F0	41456	Trip on Loss of Energy	ATX[DSP]	Normal	Trip on Loss of Energy On.
A1F1	41457	Trip on Loss of Energy OFF	ATX[DSP]	Normal	Trip on Loss of Energy.
A1F2	41458	Close Blocked by Synch Check	EVT[DSP]	Normal	Close Blocked by Synch Check.
A1F3	41459	Close Allowed	ATX[DSP]	Normal	Close Not Blocked by Synch Check.
A1F4	41460	Phase Rot. Indeterminate Alarm On	MSC[DSP]	Normal	Phase Rotation could not be determined.
A1F5	41461	Phase Rot. Indeterminate Alarm Off	MSC[DSP]	Normal	Phase Rotation could be determined.
A1F6	41462	SEF Timing	EVT[DSP]	Normal	SEF Element Timing.
A1F7	41463	SEF Not Timing	PRO[DSP]	Normal	SEF Timing Off.
A1F8	41464	SEF Tripped	EVT[DSP]	Normal	SEF Tripped.
A1F9	41465	SEF Not Tripped	PRO[DSP]	Normal	SEF Tripped Off.
A1FA	41466	SEF Trip to Lockout	EVT[DSP]	Normal	SEF Trip to Lockout.
A1FB	41467	SEF Trip to Lockout	PRO[DSP]	Normal	SEF Trip to Lockout Off.

		Off			
A1FC	41468	SEF Testing	EVT[DSP]	Normal	SEF Testing.
A1FD	41469	SEF Not Testing	ATX[DSP]	Normal	SEF Testing Off.
A1FE	41470	Current Direction Y->X Off	PRO[DSP]	Normal	Current Direction Y->X Off.
A1FF	41471	Current Direction X->Y Off	PRO[DSP]	Normal	Current Direction X->Y Off.
A200	41472	Low Single-Phase Voltage Alert On	ATX[DSP]	Normal	
A201	41473	Low Single-Phase Voltage Alert Off	ATX[DSP]	Normal	
A202	41474	Low Three-Phase Voltage Alert On	ATX[DSP]	Normal	
A203	41475	Low Three-Phase Voltage Alert Off	ATX[DSP]	Normal	
A204	41476	Phase Overcurrent Alert On	ATX[DSP]	Normal	
A205	41477	Phase Overcurrent Alert Off	ATX[DSP]	Normal	
A206	41478	Ground Overcurrent Alert On	ATX[DSP]	Normal	
A207	41479	Ground Overcurrent Alert Off	ATX[DSP]	Normal	
A208	41480	Pole A Overcurrent Timing On	PRO[DSP]	Normal	
A209	41481	Pole A Overcurrent Timing Off	PRO[DSP]	Normal	
A20A	41482	Pole B Overcurrent Timing On	PRO[DSP]	Normal	
A20B	41483	Pole B Overcurrent Timing Off	PRO[DSP]	Normal	
A20C	41484	Pole C Overcurrent Timing On	PRO[DSP]	Normal	
A20D	41485	Pole C Overcurrent Timing Off	PRO[DSP]	Normal	
A20E	41486	Ground Overcurrent Timing On	PRO[DSP]	Normal	
A20F	41487	Ground Overcurrent Timing Off	PRO[DSP]	Normal	
A210	41488	Bad Frequency Indicator Element	EVT[DSP]	Normal	Under Frequency Detector is in Fully Reset State. Data 1: **BFIE Status** Data1 Type: BFIEStatus Data 2: **BFIE Status** Data2 Type: BFIEStatus Data 3: **Terminal** Data3 Type: good_sourceRelayArg Data 4: **Frequency>** Data4 Type: DriverValueFrequency
A211	41489	Block Open Source Sect On	EVT[DSP]	Normal	Open Source Sectionalizing is Blocked.
A212	41490	Block Open Source Sect Off	EVT[DSP]	Normal	Open Source Sectionalizing is not Blocked.
A213	41491	Current Exceeds Max OC On	EVT[DSP]	Normal	Current Exceeds Max OC On Data 1: Data1 Type: RelayType Data 2: Data2 Type: RelayNumber Data 3: Data3 Type: ushort

A214	41492	Current Exceeds Max OC Off	EVT[DSP]	Normal	Current Exceeds Max OC Off Data 1: Data1 Type: RelayType Data 2: Data2 Type: RelayNumber Data 3: Data3 Type: ushort
A215	41493	Leakage Current Error Check On	EVT[DSP]	Normal	Open Source Sectionalizing is not Blocked.
A216	41494	Leakage Current Error Check Off	EVT[DSP]	Normal	Open Source Sectionalizing is not Blocked.
A217	41495	Leakage Current Error Event	EVT[DSP]	Normal	Open Source Sectionalizing is not Blocked. Data 1: Data1 Type: LeakageTrigger Data 2: Data2 Type: PoleName Data 3: Data3 Type: LeakageCurrent Data 4: Data4 Type: LeakageCurrent
A218	41496	POW Close Override	EVT[DSP]	Normal	POW Close Override w Fault Current Data 1: Data1 Type: POWFaultCurrent Data 2: Data2 Type: POWFaultCurrent Data 3: Data3 Type: POWFaultCurrent Data 4: Data4 Type: POWFaultCurrent
A219	41497	ATX State Change	EVT[DSP]	Normal	ATX State Change. Data 1: Data1 Type: ATXState Data 2: Data2 Type: ATXMode Data 3: Data3 Type: ATXState
A21A	41498	Current gt Max Interrupting Current On	PRO[DSP]	Normal	Current Exceeds Max Interrupting Current On. Data 1: Data1 Type: RelayType Data 2: Data2 Type: PoleMask
A21B	41499	Current gt Max Interrupting Current Off	PRO[DSP]	Normal	Current Exceeds Max Interrupting Current Off. Data 1: Data1 Type: RelayType Data 2: Data2 Type: PoleMask
A21C	41500	Closed Command Rescinded	EVT[DSP]	Normal	Open Source Sectionalizing is not Blocked.
A21D	41501	Volt Supervised SEF Logic Change	PRO[MCU]	Normal	Open Source Sectionalizing is not Blocked. Data 1: Data1 Type: VSSEFStatus Data 4: Data4 Type: VSSEFLogicState
A21E	41502	Prot OC Elems Permited By Dir El	EVT[DSP]	Normal	Protection OC Permitted by Direction Element Data 1: **Faulted side or load side as determined by the Directional Element. Possible values are TermX or TermY or Both. In the latter case all overcurrent elements run without directional supervision.** Data1 Type: DETerm Data 2: **Mask of overcurrent elements disabled by the Directional Element, MSW.** Data2 Type: ushort Data 3: **Mask of overcurrent elements disabled by the Directional Element, LSW** Data3 Type: ushort Data 4: **SEF component of torque** Data4 Type: ushort
A22B	41515	Close Pending Sync Check On	EVT[DSP]	Normal	
A22C	41516	Close Pending Sync Check Off	EVT[DSP]	Normal	
A22D	41517	Protect Fault X Latched On	EVT[DSP]	Normal	

A22E	41518	Protect Fault X Latched Off	EVT[DSP]	Normal	
A22F	41519	Protect Fault Y Latched On	EVT[DSP]	Normal	
A230	41520	Protect Fault Y Latched Off	EVT[DSP]	Normal	
A231	41521	Switch TCC to InitialT rip	EVT[DSP]	Normal	Data 1: Data1 Type: Phase
A232	41522	Phasor Captured On	EVT[DSP]	Normal	
A233	41523	Phasor Captured Off	EVT[DSP]	Normal	
A234	41524	External Trip Output Issued	EVT[DSP]	Normal	Data 1: Data1 Type: ExternalOutput Data 2: Data2 Type: ExtTripCommand Data 3: Data3 Type: ExtTripCommand Data 4: Data4 Type: ExtTripCommand
A235	41525	VSSEF Alert X On	PRO[MCU]	Normal	VSSEFAlert X On
A236	41526	VSSEF Alert X Off	PRO[MCU]	Normal	VSSEFAlert X Off
A237	41527	VSSEF Alert Y On	PRO[MCU]	Normal	VSSEFAlert Y On
A238	41528	VSSEF Alert Y Off	PRO[MCU]	Normal	VSSEFAlert Y Off
A239	41529	Leakage Curnt Chk Error On	PRO[MCU]	Normal	
A23A	41530	Leakage Curnt Chk Error Off	PRO[MCU]	Normal	
A23B	41531	Leakage Curnt Chk Warning On	PRO[MCU]	Normal	
A23C	41532	Leakage Curnt Chk Warning Off	PRO[MCU]	Normal	
A23D	41533	Leakage Curnt Chk Alarm On	PRO[MCU]	Normal	
A23E	41534	Leakage Curnt Chk Alarm Off	PRO[MCU]	Normal	
A23F	41535	IMS Pulse POW Long Delay	IMS[DSP]	Normal	
A240	41536	IMS Repulse POW Long Delay	IMS[DSP]	Normal	
A241	41537	IMS Close POW Long Delay	IMS[DSP]	Normal	
A242	41538	CPLD Communication Problem On	EVT[DSP]	Normal	
A243	41539	CPLD Communication ProblemOff	EVT[DSP]	Normal	
A244	41540	POW Long Delay On	EVT[DSP]	Normal	
A245	41541	POW Long Delay Off	EVT[DSP]	Normal	
A246	41542	Coil Current Samples Alarm ON	EVT[DSP]	Normal	
A247	41543	Coil Current Samples Alarm OFF	EVT[DSP]	Normal	
A248	41544	DPR Call Error	EVT[DSP]	Normal	

A249	41545	Direct Transfer Trip	ATX[DSP]	Normal	
A24A	41546	DTAP Indication Direction 1 On	EVT[DSP]	Normal	Data 1: Data1 Type: CurrentDirection Data 2: Data2 Type: Volts Data 3: Data3 Type: P0Value Data 4: Data4 Type: ushort
A24B	41547	DTAP Indication Direction 1 Off	EVT[DSP]	Normal	Data 1: Data1 Type: CurrentDirection Data 2: Data2 Type: Volts Data 3: Data3 Type: P0Value Data 4: Data4 Type: ushort
A24C	41548	DTAP Trip Direction 1 On	EVT[DSP]	Normal	Data 1: Data1 Type: CurrentDirection Data 2: Data2 Type: Volts Data 3: Data3 Type: P0Value Data 4: Data4 Type: ushort
A24D	41549	DTAP Trip Direction 1 Off	EVT[DSP]	Normal	Data 1: Data1 Type: CurrentDirection Data 2: Data2 Type: Volts Data 3: Data3 Type: P0Value Data 4: Data4 Type: ushort
A24E	41550	DTAP Indication Direction 2 On	EVT[DSP]	Normal	Data 1: Data1 Type: CurrentDirection Data 2: Data2 Type: Volts Data 3: Data3 Type: P0Value Data 4: Data4 Type: ushort
A24F	41551	DTAP Indication Direction 2 Off	EVT[DSP]	Normal	Data 1: Data1 Type: CurrentDirection Data 2: Data2 Type: Volts Data 3: Data3 Type: P0Value Data 4: Data4 Type: ushort
A250	41552	DTAP Trip Direction 2 On	EVT[DSP]	Normal	Data 1: Data1 Type: CurrentDirection Data 2: Data2 Type: Volts Data 3: Data3 Type: P0Value Data 4: Data4 Type: ushort
A251	41553	DTAP Trip Direction 2 Off	EVT[DSP]	Normal	Data 1: Data1 Type: CurrentDirection Data 2: Data2 Type: Volts Data 3: Data3 Type: P0Value Data 4: Data4 Type: ushort
A252	41554	Wattmetric Indication Direction 1 On	EVT[DSP]	Normal	Data 1: Data1 Type: CurrentDirection Data 2: Data2 Type: Volts Data 3: Data3 Type: P0Value Data 4: Data4 Type: ushort
A253	41555	Wattmetric Indication Direction 1 Off	EVT[DSP]	Normal	Data 1: Data1 Type: CurrentDirection

					Data 2: Data2 Type: Volts Data 3: Data3 Type: P0Value Data 4: Data4 Type: ushort
A254	41556	Wattmetric Trip Direction 1 On	EVT[DSP]	Normal	Data 1: Data1 Type: CurrentDirection Data 2: Data2 Type: Volts Data 3: Data3 Type: P0Value Data 4: Data4 Type: ushort
A255	41557	Wattmetric Trip Direction 1 Off	EVT[DSP]	Normal	Data 1: Data1 Type: CurrentDirection Data 2: Data2 Type: Volts Data 3: Data3 Type: P0Value Data 4: Data4 Type: ushort
A256	41558	Wattmetric Indication Direction 2 On	EVT[DSP]	Normal	Data 1: Data1 Type: CurrentDirection Data 2: Data2 Type: Volts Data 3: Data3 Type: P0Value Data 4: Data4 Type: ushort
A257	41559	Wattmetric Indication Direction 2 Off	EVT[DSP]	Normal	Data 1: Data1 Type: CurrentDirection Data 2: Data2 Type: Volts Data 3: Data3 Type: P0Value Data 4: Data4 Type: ushort
A258	41560	Wattmetric Trip Direction 2 On	EVT[DSP]	Normal	Data 1: Data1 Type: CurrentDirection Data 2: Data2 Type: Volts Data 3: Data3 Type: P0Value Data 4: Data4 Type: ushort
A259	41561	Wattmetric Trip Direction 2 Off	EVT[DSP]	Normal	Data 1: Data1 Type: CurrentDirection Data 2: Data2 Type: Volts Data 3: Data3 Type: P0Value Data 4: Data4 Type: ushort
A25A	41562	DTAP Logic Change	EVT[DSP]	Extended	Data 1: Data1 Type: REFCLEventCode Data 2: Data2 Type: Volts Data 3: Data3 Type: P0Value Data 4: Data4 Type: OnOff
A25B	41563	Wattmetric Logic Change	EVT[DSP]	Extended	Data 1: Data1 Type: WattmetricEventCode Data 2: Data2 Type: Volts Data 3: Data3 Type: P0Value Data 4: Data4 Type: OnOff
A25C	41564	Wattmetric Timing Direction 1 On	EVT[DSP]	Normal	Data 1: Data1 Type: CurrentDirection Data 2: Data2 Type: Volts Data 3: Data3 Type: P0Value Data 4: Data4 Type: ushort

A25D	41565	Wattmetric Timing Direction 1 Off	EVT[DSP]	Normal	Data 1: Data1 Type: CurrentDirection Data 2: Data2 Type: Volts Data 3: Data3 Type: P0Value Data 4: Data4 Type: ushort
A25E	41566	Wattmetric Timing Direction 2 On	EVT[DSP]	Normal	Data 1: Data1 Type: CurrentDirection Data 2: Data2 Type: Volts Data 3: Data3 Type: P0Value Data 4: Data4 Type: ushort
A25F	41567	Wattmetric Timing Direction 2 Off	EVT[DSP]	Normal	Data 1: Data1 Type: CurrentDirection Data 2: Data2 Type: Volts Data 3: Data3 Type: P0Value Data 4: Data4 Type: ushort
A264	41572	Core2 Initialization Started	C2H[DSP]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort
A265	41573	Core2 Initialization Finished	C2H[DSP]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort
A266	41574	Core2 Watch Dog Failure	C2H[DSP]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort
A267	41575	Core2 Reboot	C2H[DSP]	Normal	Data 1: Data1 Type: RebootStatus Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort
A268	41576	Core2 Exceptions	C2H[DSP]	Normal	Data 1: Data1 Type: Core2Exceptions Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort
A269	41577	PMU State Change	C2H[DSP]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort
A26A	41578	PMU Config Change	C2H[DSP]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort
A26B	41579	PMU Config Error	C2H[DSP]	Normal	Data 1: Data1 Type: PMUConfigError Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort

A26C	41580	Crystal Frequency Read Error	C2H[DSP]	Normal	Data 1: Data1 Type: DataReadStatus Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort
A26D	41581	REFLC/EP-P0 Trip Blocked On	PRO[DSP]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
A26E	41582	REFLC/EP-P0 Trip Blocked Off	PRO[DSP]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
A26f	41583	ROCOF Enhanced Security Buffer Clear	PRO[DSP]	Normal	Data 1: Data1 Type: EnabledDisabled Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
A270	41584	81R - ROCOF Trip On	PRO[DSP]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
A271	41585	81R - ROCOF Trip Off	PRO[DSP]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
A278	41592	Close after Voltage Trip	PRO[DSP]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
A279	41593	Close after Frequency Trip	PRO[DSP]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
A27A	41594	Close after ROCOF Trip	PRO[DSP]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
A27B	41595	Close after Directional Power Trip	PRO[DSP]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort

A27C	41596	Directional Power Timing On	PRO[DSP]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
A27D	41597	Directional Power Timing Off	PRO[DSP]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
A27E	41598	Extended Shots to Lockout Enabled	EVT[DSP]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
A27F	41599	Extended Shots to Lockout Disabled	EVT[DSP]	Normal	Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
A280	41600	ROCOF PLL Saturation	EVT[DSP]	Normal	ROCOF saturation of PLL integrator OR output of PI module of PLL Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
A281	41601	Overcurrent 20% Trip Milestone On	EVT[DSP]	Normal	Overcurrent 20 Pct Trip Milestone On Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
A282	41602	Overcurrent 20% Trip Milestone Off	EVT[DSP]	Normal	Overcurrent 20 Pct Trip Milestone Off Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
A283	41603	Overcurrent 50% Trip Milestone On	EVT[DSP]	Normal	Overcurrent 50 Pct Trip Milestone On Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
A284	41604	Overcurrent 50% Trip Milestone Off	EVT[DSP]	Normal	Overcurrent 50 Pct Trip Milestone Off Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
A285	41605	Overcurrent 80% Trip Milestone On	EVT[DSP]	Normal	Overcurrent 80 Pct Trip Milestone On Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort

					Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
A286	41606	Overcurrent 80% Trip Milestone Off	EVT[DSP]	Normal	Overcurrent 80 Pct Trip Milestone Off Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
A287	41607	ROCOF Frequency Out Of Range On	PRO[DSP]	Normal	ROCOF Frequency Out Of Range On Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort
A288	41608	ROCOF Frequency Out Of Range Off	PRO[DSP]	Normal	ROCOF Frequency Out Of Range Off Data 1: Data1 Type: ushort Data 2: Data2 Type: ushort Data 3: Data3 Type: ushort Data 4: Data4 Type: ushort