

A. Serial Control Formats

Table A-1: Internal BITE Packet (RCP8 to Host)

The RCP8 can optionally generate this “internal” BITE packet. These bits convey additional status information that is not contained in any of the other transmission formats. The shutdown status of the RCP8 (up to 32 different conditions) is contained in the first five bytes. The last five bytes hold other miscellaneous information. The identification byte is selectable, so that conflicts with other BITE packets can be avoided.

Char	Function
1	SYNC Byte (C0 Hex)
2	Identification byte (User Choice)
3	Shutdown Conditions 0–6 D6 = EL Velocity Exceeded D5 = AZ Velocity Exceeded D4 = EL Axis Unresponsive D3 = AZ Axis Unresponsive D2 = EL Tach Inconsistent D1 = AZ Tach Inconsistent D0 = Diagnostics Failed
4	Shutdown Conditions 7–13 D6 = IP-SERIAL Conflicts D5 = EL Upper Lim Switch D4 = EL Lower Lim Switch D3 = EL–UP Shutdown Limit D2 = EL–LO Shutdown Limit D1 = AZ–HI Shutdown Limit D0 = AZ–LO Shutdown Limit
5	Shutdown Conditions 14–20 D6 = Reserved D5 = Reserved D4 = Reserved D3 = Reserved D2 = IP-DIGITAL-48 Conflicts D1 = Output Remap Conflict D0 = Missing IP-SYNCHRO
6	Shutdown Conditions 21–27 D6 = Reserved D5 = Reserved D4 = Reserved D3 = Reserved D2 = Reserved D1 = Reserved D0 = Reserved

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| 7 | Shutdown Conditions 28–31
D6 = Spare
D5 = Power-up error(s) occurred
D4 = RCP8 is shutdown (OR of Bits 0–31)
D3 = User Shutdown #2
D2 = User Shutdown #1
D1 = Reserved
D0 = Reserved |
| 8 | INU Status
D6 = Invalid horizontal position/velocity
D5 = Reduced vertical position/velocity
D4 = Invalid vertical position/velocity
D3 = Reduced roll and pitch
D2 = Invalid roll and pitch
D1 = Reduced heading
D0 = Invalid heading |
| 9 | Antenna/Radar/Servo and INU status
D6 = Reduced horizontal position/velocity
D5 = No INU Data Stream
D4 = T/R Power On
D3 = T/R Local mode
D2 = LSB pulse width
D1 = MSB pulse width
D0 = Mag. current normal |
| 10 | Antenna/Radar/Servo status
D6 = Low air flow
D5 = Low Waveguide pressure
D4 = Servo Power
D3 = Antenna Local mode
D2 = Interlock Open
D1 = Standby
D0 = Radiate On |
| 11 | Local Variables V6, V5, V4, V3, V2, V1, V0 |
| 12 | Local Variables V13, V12, V11, V10, V9, V8, V7 |
| 13 | END OF MESSAGE (FF Hex) |