

Error End of Packet (EEP) not reported properly for the UT200SpW4RTR SpaceWire Router

Table 1: Cross Reference of Applicable Products

Product Name:	Manufacturer Part Number	SMD #	Device Type	Internal PIC*
4-PORT SPACEWIRE ROUTER	UT200SpW4RTR	NA Note 1	NA	WD41A

Note 1: WD41A will not be sold against the SMD. All SMD shipments will be with Rev B Silicon.

*PIC = Product Identification Code

1.0 Overview

The UT200SpW4RTR 4-Port SpaceWire router contains an anomaly where the Error End of Packet (EEP) is not properly written into the receiving FIFO when the router is clocked at less than 20Mbps and an error (parity, disconnect, escape, etc) is detected.

Per ECSS-E-ST-50-12C Section 10.5.3 when an EEP is received by the destination node the transmitted packet is flagged signaling that an error has occurred and the packet was not terminated properly. The packet that was transmitted improperly, and terminated with an EEP into the receive FIFO, shall be spilled. The data contained in the FIFO can be valid, but the complete data packet was not successfully transmitted to the destination node.

If an error occurs during the transfer of data to the destination node and an EEP is not received, the next data packet will be transmitted into the receiving FIFO, and only terminated once an End of Packet EOP or an EEP is received.

2.0 Corrective Action

This anomaly can be prevented by running the UT200SpW4RTR at 20Mbps or higher.

3.0 Rev A vs. Rev B

Revision A of the UT200SpW4RTR contains this anomaly. Revision B will correct this errata.