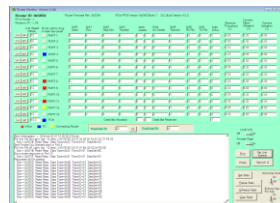
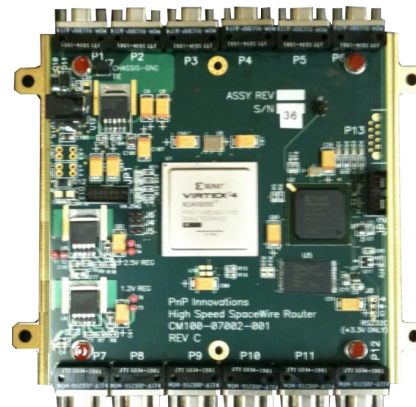


## High Speed SpaceWire Router

PnP Innovations, Inc has developed several key avionics components to support modular spacecraft design. One such component is the SpaceWire (SpW) router, which can serve as the primary network data router for data network implementations.

SpaceWire is a packet based communications protocol standardized by the European Space Agency. Designed specifically for use on board spacecraft, it has gained increasing acceptance from the space community.

Included with the router is a Router Monitor GUI for Windows, which unobtrusively allows for monitoring link conditions inside the router. With the use of the Router Monitor, a total of 14 parameters per port are captured and reported upon request. The statistics are collected in the background and do not in any way affect router performance.



### SPACEWIRE PORTS

- Twelve high speed SpaceWire ports (LVDS)
- Transmit speeds of 10, 25, 50, 75, 150, & 300 Mbps
- Each port individually programmable
- Supports any receive speed from 5 to 300 Mbps
- Compliant with ESA SpW specification

### ROUTER FEATURES

- Path, logical & regional addressing
- Group Adaptive Routing
- Alternate paths on a route-by-route basis
- Store and Forward option on port-by-port basis
- Two built-in methods for preventing deadlock
- Status Messages
- Broadcast and multi-cast modes

### BOARD INFORMATION

- +5V Power Input
- Small Size - 5" x 5.15"
- Power consumption of 5 to 7 Watts
- Virtex4 SX55 Utilized for SpW functionality

### RAD HARD SPACEWIRE ROUTER

- Version pictured is lab grade equivalent to flight qualified SpaceWire router
- 100 krad TID
- Rad Hard Units feature Actel RTAX 2000 & 200 Mbps max link speed

### APPLICATIONS

- Sensor Interfacing
- EGSE (Electronic Ground Support Equipment)
- Network Prototyping
- Spacewire Evaluation

### DELIVERABLES

- User Manual
- Lab grade SpaceWire cable (optional)
- Router Monitor software application
- Wall wart style power cable