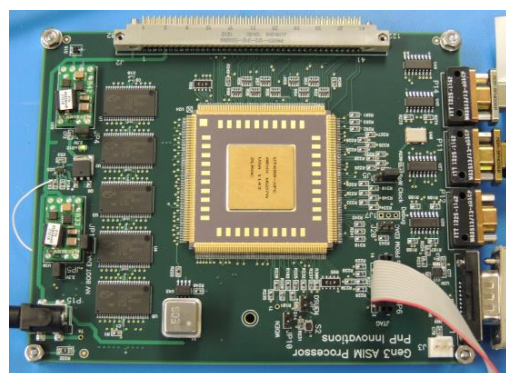
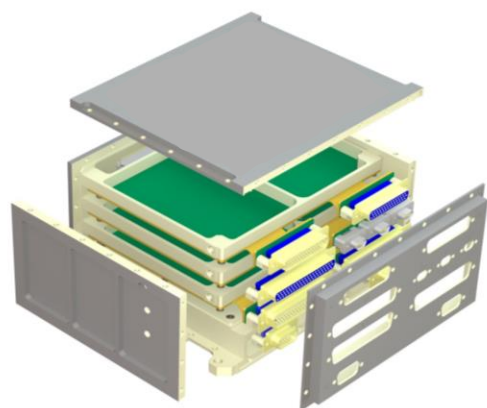


Gen3 ASIM – High Performance Payload Interface

PnP Innovations has developed a radiation hardened, high performance ASIM suitable for a variety of spacecraft missions. The unit is equipped with enough functionality to operate as a main processor, or function as an edge processor and handle multiple sensor interfaces. This design has taken a modular approach, with a separate Power Module supplying power to the system. At the heart of the unit is the Processor Module, which includes a SPARC V8 based LEON3 processor with three SpaceWire ports. The bulk of the sensor interface occurs with the IO Module, which provides a wealth of interface options for controlling multiple sensors. Additional custom modules may be readily added to the system via the PCI expansions bus. Support for standard C/C++ compilers allows for interfacing to standard or custom networks.



HOST INTERFACES

- Redundant +28V Isolated Power Input
- Three SpaceWire Ports
- PPS (Timing Synchronization)

MODULAR DESIGN

- Processor Module
- Power Module
- IO Module
- Additional Expansion Modules via PCI

PROCESSOR MODULE

- Fault Tolerant 32-bit SPARC V8 LEON3
- 2 MB RAM
- 2 MB Non-volatile storage
- Two SpaceWire Ports
- JTAG Debug Port for Processor

IO MODULE

- 60 Analog input channels
- Four excitation circuits
- Eight RS422 Channels
- Four asynchronous UARTS
- Two synchronous serial channels
- 6 High Voltage I/O channels

FLIGHT QUALIFIED VERSIONS

- 100krad flight units
- Suitable for Class A missions
- Flight hardware manufactured by DDES
- Form Factor of 6.4" x 6.4" x 3.8"

DELIVERABLES

- User Manual
- Example application code
- Laboratory or Flight Units Available