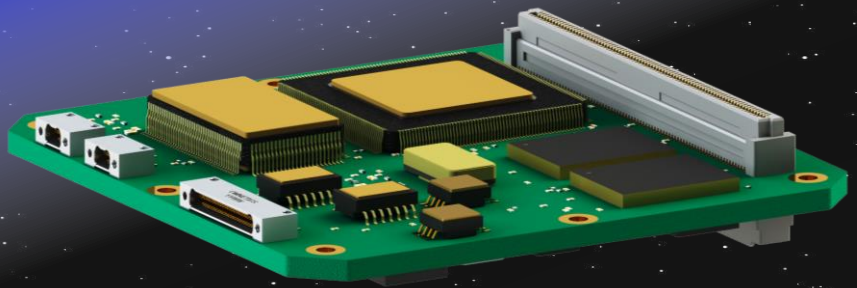


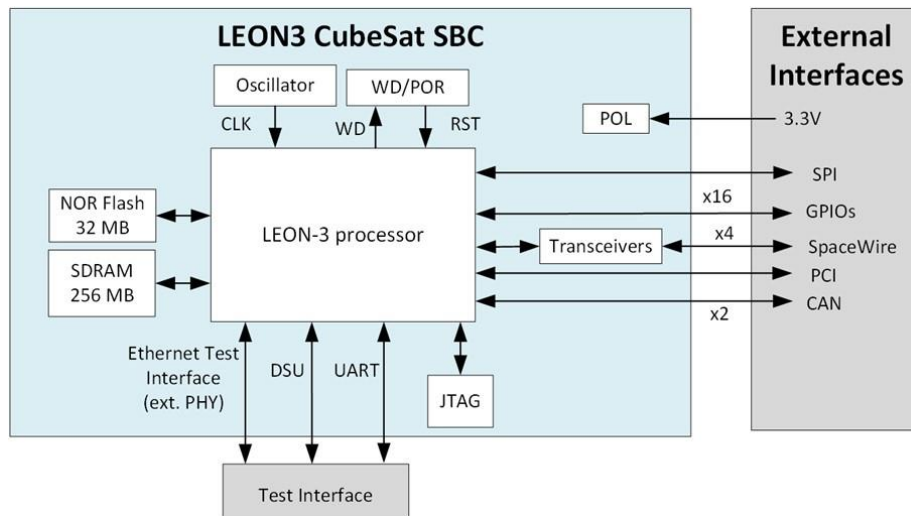
Radiation Hardened Single Board Computer

FACT SHEET



OVERVIEW

Cubic Aerospace's radiation hardened Single Board Computer (SBC) provides high performance at low power, within the standard CubeSat form-factor. Designed for high reliability missions, the SBC combines a radiation hardened design, low power, and a wide range of interfaces including: 4 SpaceWire ports, CAN bus, UART, SPI, I²C and 1553B. The SBC also provides re-programmable FPGA functionality for mission specific configurations.



SPECIFICATIONS

| | | |
|--------------------------------|--|-------------------------|
| Dimensions | 93 x 93 x 14 | mm |
| Mass | 125 | g |
| Operating Voltage | +3.3 | V |
| Power Consumption ¹ | < 5 | W |
| Maximum Clock Speed | 132 | MHz |
| Computational Throughput | 158 | DMIPS |
| Operating Temperature | -40 to 105 | °C |
| Radiation Tolerance (TID) | > 50 | kRad (Si) |
| Radiation Tolerance (SEE) | Operate through: LET > 37 MeV Survive: LET > 87 MeV | MeV-cm ² /mg |

1. Power can be reduced by operating at a lower clock speed.

APPLICATIONS

- Low power, high-reliability flight computer

FEATURES

Processor

UT700 LEON3 FT core

- 33-132 MHz Clock
 - up to 158 DMIPS
- SPARC V8 Compliant

Memory

- 256 MB of EDAC SDRAM
- 32 MB of EDAC NOR Flash

Interfaces

- Spacewire (x4)
- UART
- SPI
- I²C
- CAN
- 16 GPIO
- 1553B (optional)
- Ethernet & DSU (GSE)

General

- CubeSat form factor
- Flexible architecture
- Re-configurable FPGA

INQUIRIES

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