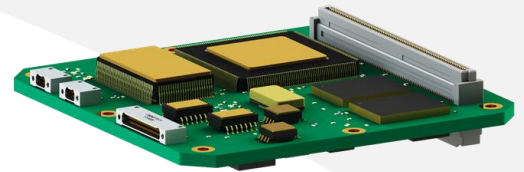




ibeos

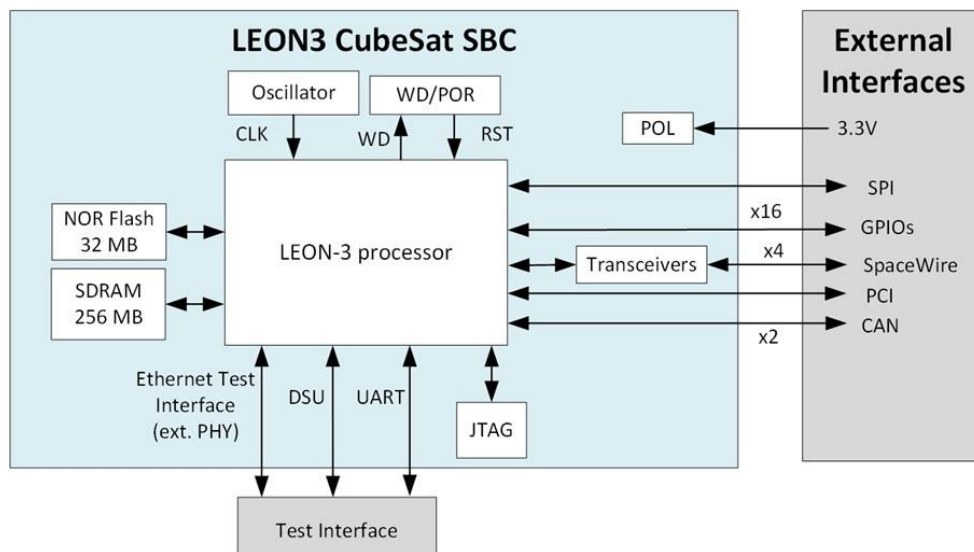
Radiation Hardened Single Board Computer



OVERVIEW

Ibeos' radiation hardened Single Board Computer (SBC) provides high computational performance at low power, within the standard CubeSat form-factor. Designed for high reliability missions, the SBC combines a radiation hardened and low power compute architecture with a wide range of interfaces including: SpaceWire, CAN, UART, SPI, I²C and 1553B.

BLOCK DIAGRAM



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

Features

- Low-power, high-reliability flight computer
- CubeSat form factor
- Flexible architecture
- Re-configurable FPGA

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)

Inquiries

Abigail Davidson
ahd@ibeos.com



Cubic Aerospace is now Ibeos! Visit us at our new site below.