

SPACECRAFT SYSTEMS

XY61580 Radiation-Resistant 1553B Bus Controller

The XY61580 is a high-performance bus controller integrating BC, RT, and MT functions. It provides a complete and flexible interface between microprocessors and the 1553B data bus. Fabricated with CMOS technology, it features strong radiation resistance, high-speed data transmission, and low power consumption. The controller is compatible with international standard products of the same type.

TECHNICAL SPECIFICATIONS

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Process Technology	0.5 μm
Dimensions (mm)	48 × 26
Weight (g)	< 15
Operating Temperature (°C)	-55 to +125
Storage Temperature (°C)	-65 to +150
Communication Interface	1553B / PCI
Package Type	CDIP70
Quality Grade	CAST C

Quick Overview

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Key Features

- Integrated MIL-STD-1553 interface terminals.
- Flexible processor and memory interface.
- Standard 4K×16bit RAM with optional parity generation and verification.
- Automatic BC retransmission and flexible RT data buffering.

Applications

- Used in aerospace embedded electronic systems.

Documentation & Resources

- [Technical Specifications](#)
- [Applications](#)