

SPACECRAFT SYSTEMS

SiP2115 Universal Onboard Computer Module

The SiP2115 is a micro onboard computer module based on the SoC2008 processor core. It integrates large-capacity SRAM data storage units and FLASH program storage units. Compared with traditional designs, it achieves more than 80% reduction in size, weight, and power consumption, with cost reduced by over 60%. The SiP2115 adopts a ceramic package and domestically produced radiation-hardened chips, making it suitable for high-reliability and long-lifetime space missions.

TECHNICAL SPECIFICATIONS

SPECIFICATIONS	
Function	Computing module functionality
Packaging Technology	Bare-die based packaging
Dimensions (mm)	37 × 37 × 5
Weight (g)	23
Operating Temperature (°C)	−55 to +125
Storage Temperature (°C)	−65 to +150
Communication Interface	1553B / RS-422
Package Type	CQFP256 ceramic package
Quality Grade	CAST C

Quick Overview

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Key Specifications

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Key Features

- High functional integration with processor, memory, and bus controller.
- Miniaturized design — more than 80% reduction in size, weight, and power consumption.
- Cost-effective — manufacturing cost reduced by over 60%.
- Fully independent and controllable, using domestically produced bare-die chips.

Applications

- Used in microsatellites and embedded electronic systems, first flight in 2016.

Documentation & Resources

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