

SPACECRAFT SYSTEMS

SiP2113 Universal Onboard Computer Module

The SiP2113 is a micro onboard computer module designed for aerospace embedded computing applications, utilizing SiP three-dimensional packaging technology. It integrates the SoC2008 processor, large-capacity SRAM data storage units, and high-capacity FLASH program storage units. Compared with conventional designs, the SiP2113 achieves more than 80% reduction in size, weight, and power consumption, while lowering cost by over 70%.

TECHNICAL SPECIFICATIONS

SPECIFICATIONS	
Function	Computing module functionality
Packaging Technology	Bare-die based packaging
Dimensions (mm)	35 × 35 × 2
Weight (g)	7
Operating Temperature (°C)	-55 to +125
Storage Temperature (°C)	-65 to +150
Communication Interface	1553B / RS-422
Package Type	BGA337 plastic package
Quality Grade	CAST C

Quick Overview

The SiP2113 is a micro onboard computer module designed for aerospace embedded computing applications, utilizing SiP three-dimensional packaging technology. It integrates the SoC2008 processor, large-capacity SRAM data storage units, and high-capacity FLASH program storage units. Compared with conventional designs, the SiP2113 achieves more than 80% reduction in size, weight, and power consumption, while lowering cost by over 70%.

Key Specifications

Parameter	Value
Function	Computing module functionality
Packaging Technology	Bare-die based packaging
Dimensions (mm)	35 × 35 × 2
Weight (g)	7
Operating Temperature (°C)	-55 to +125
Storage Temperature (°C)	-65 to +150
Communication Interface	1553B / RS-422
Package Type	BGA337 plastic package
Quality Grade	CAST C

Key Features

- High functional integration with processor, memory, and bus controller.
- Miniaturized design — over 80% reduction in size, weight, and power consumption.
- Low cost — manufacturing cost reduced by over 70%.
- Fully independent and controllable, using domestically produced chips.

Applications

- Applied in microsatellites and embedded electronic systems, first flight in 2015.

Documentation & Resources

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