

SPACECRAFT SYSTEMS

Microsatellite Integrated Electronics

The Microsatellite Integrated Electronics system is a highly integrated avionics solution developed with aerospace-grade components. It provides long service life, compact size, and high performance while maintaining cost efficiency and rapid development capability. The system combines platform control, data management, computation, and signal processing within a unified module, achieving high integration and reliability. It is designed to meet the requirements of low-cost, batch-produced, and fast-response satellite missions for microsatellites, nanosatellites, and constellation platforms.

TECHNICAL SPECIFICATIONS

SPECIFICATIONS	
Model	C-ICDE-DMR/C-2
Technology	SiP / SoC
Flight Record	First flight in 2019
Dimensions (mm)	293 × 203 × 212
Weight (kg)	3.5
Service Life (years)	15
Operating Temperature (°C)	-35 to +70
Storage Temperature (°C)	-45 to +80
Communication Interface	1553B Bus / RS422 / Synchronous Port
Power Supply	20 V-40 V

Quick Overview

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Key Specifications

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Key Features

- High performance — equipped with the high-performance SoC2008 processor.
- High reliability — dual-module redundancy with full fault-tolerant management capability.
- Compact structure — designed using the SiP2115 onboard computer module.
- Lightweight — total weight approximately 3.5 kg.

Applications

- Used in microsatellites, nanosatellites, and constellation platforms requiring high reliability and integration.

Documentation & Resources

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