

SPACECRAFT SYSTEMS

NASSAT Dual-Module Computer

The NASSAT Dual-Module Computer is an enhanced version of the NASSAT onboard computer, designed for longer lifespan and higher reliability in micro- and nanosatellite applications. It adopts SiP and SoC technologies with a dual-computer redundant architecture and integrated fault management module. The system provides superior reliability, performance, compact structure, lightweight design, and low power consumption, making it ideal for demanding space missions.

TECHNICAL SPECIFICATIONS

SPECIFICATIONS	
Model	C-GNCC-DMR/C-7
Technology	SiP / SoC
Flight Record	First flight in 2018
Dimensions (mm)	130 × 130 × 165.5
Weight (kg)	1.5 ± 0.1
Service Life (years)	3–5
Operating Temperature (°C)	–35 to +70
Storage Temperature (°C)	–45 to +80
Communication Interface	CAN / RS422 / I²C
Power Supply	+5 V, +12 V / –12 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 1.5 kg.

Applications

- Used as a high-reliability central control computer in micro- and nanosatellite systems.

Documentation & Resources

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