

SPACECRAFT SYSTEMS

SiP6117M Programmable Signal Processing Module

The SiP6117M Programmable Signal Processing Module is a system-level integrated product that combines FPGA, high-precision A/D, multi-channel A/D, and high-precision D/A modules. It offers high versatility, reliability, compact size, and low cost, making it widely applicable to optoelectronic and aerospace electronic systems such as fiber-optic gyroscopes and electromechanical platforms.

TECHNICAL SPECIFICATIONS

SPECIFICATIONS	
Function	Programmable signal processing SiP
Packaging Technology	Bare-die based packaging
Dimensions (mm)	22 × 22 × 2
Weight (g)	< 5
Operating Temperature (°C)	−40 to +85
Storage Temperature (°C)	−65 to +150
Package Type	BGA336
Quality Grade	Military Grade

Quick Overview

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Key Specifications

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Key Features

- High functional integration — integrates FPGA, configuration PROM, high-precision A/D, multi-channel A/D, high-precision D/A, and user I/O.
- Miniaturized design — reduces size, weight, and power consumption by over 60%.
- Low cost — overall cost reduction exceeding 65%.
- High reliability — suitable for aerospace-grade applications.

Applications

- Used in fiber-optic gyroscopes and electromechanical platforms requiring high-precision signal processing.

Documentation & Resources

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