



SSMM

High reliability, high-speed solid-state mass memory for low Earth orbit spacecraft.



 **ITAR-Free**

 **TRL 9**

Key Specifications

Operating Temperature	-10 °C to +50 °C
Form Factor	EuroCard 3U
Dimensions	160 x 107 x 29 mm
Mass	0.35 kg
Design Life	Up to 8 years LEO
Supply Voltage	+5 V regulated
Power Consumption	6 W nominal
Latch-Up Detection Circuitry	All internal power supplies
Health Monitoring	Internal voltages & currents Internal temperatures
In-Flight Reprogrammable	Yes, 2 Boot areas

Interfaces

TMTC Interfaces	Dual Redundant CAN 1x RS-485 2x RS-422
PPS	2x Differential
High-Speed Data Input	4x GTx up to 4 Gbps
High-Speed Data Output (Primary)	2x GTx up to 2 Gbps LVDS input for flow control
High-Speed Data Output (Secondary)	6x LVDS up to 100 Mbps
Inter-SSMM Input	1x GTx up to 4 Gbps
Inter-SSMM Output	1x GTx up to 4 Gbps
Analog Inputs	5 x 0-3.3 V
Debugging	Gigabit Ethernet

Functionality Highlights

- 512 GB stand-alone, or combined in parallel to create larger memory banks.
- Read and write speeds of up to 26 Gbps.
- Built in ECC and bad block management.

Memory Specifications

Capacity	512 GB
Maximum Read Speed	26 Gbps
Maximum Write Speed	26 Gbps
ECC	Reed-Solomon (128, 120)
Built-In Functions	Bad block management Memory testing Individual image/ full erase Image table management Image compression (ZIP, JPEG 2000) Image thumbnail generation Image histogram generation

ABOUT DRAGONFLY AEROSPACE

Dragonfly Aerospace is an industry leader in world-class, high-performance imaging satellites and payloads. Our turnkey solutions for imaging satellites get these strategic assets operational on orbit within minimum time, cost and risk.