

AEROSPACE & DEFENSE SOLUTIONS

THE INDUSTRY'S HIGHEST THROUGHPUT SOLUTIONS



CYPRESS SOLUTIONS FOR AEROSPACE & DEFENSE

Cypress's radiation-hardened and defense memory products are leading the aerospace & defense industry in performance and reliability. The Quad Data Rate QDR®-II+ and Fast Asynchronous portfolio of radiation-hardened SRAM provide unmatched density and access times, which enable next-generation space system architectures. Our broad defense portfolio addresses the design challenges and requirements of next-generation defense platforms.

HIGHLY RELIABLE, RADIATION-HARDENED SOLUTIONS

Satellites operating in space must endure extreme operating environments. Cypress's radiation hardened memory products are QML-V certified meeting the reliability and lifecycle demands of space applications. These SRAMs enhance overall system computing limits, while providing SWaP benefits and greater design flexibility.

Device	Rad Stop™ QDR® II + SRAM	Rad Stop™ FAST Async SRAM
Quad Data Rate (QDR)	✓	N/A
Radiation Resistance (TID, SEE)	✓	✓
QML-V & QML-Q Screening	✓	✓
Datapack	✓	✓
Memory Controller	✓	N/A

COMPREHENSIVE DEFENSE PORTFOLIO

Cypress's defense portfolio offers a wide selection of memories, clocks, and programmable logic devices which enable designers to introduce flexibility and rapid product development while reducing risk and system cost. Our nvSRAM products offer the high performance of traditional SRAMs while providing the added benefits of non-volatility.

QUALITY DELIVERED

Our aerospace and defense products adhere to the most stringent standards in the industry. Dedicated process flows allow these products to meet or exceed the QML-Q certification for military applications and QML-V certification for space applications. Proprietary manufacturing processes ensure zero defect products, which feature long lifecycles based on mature and reliable process technologies.

DATAPACK OFFERING

Cypress offers the option of purchasing a datapack with all QML-certified products. This datapack tabulates data gathered during the certification process including radiation data, read and record electrical data, and tri-temperature test data. The datapack is offered in both hard and soft copy formats and is matched to individual part serial numbers.

MEMORY CONTROLLER

A memory controller is available free of charge, which allows the radiation-hardened QDR-II+ SRAM to interface with the Xilinx Virtex 5QV and the Microsemi RTAX-S.

CYPRESS CUSTOMIZABLE SOLUTIONS

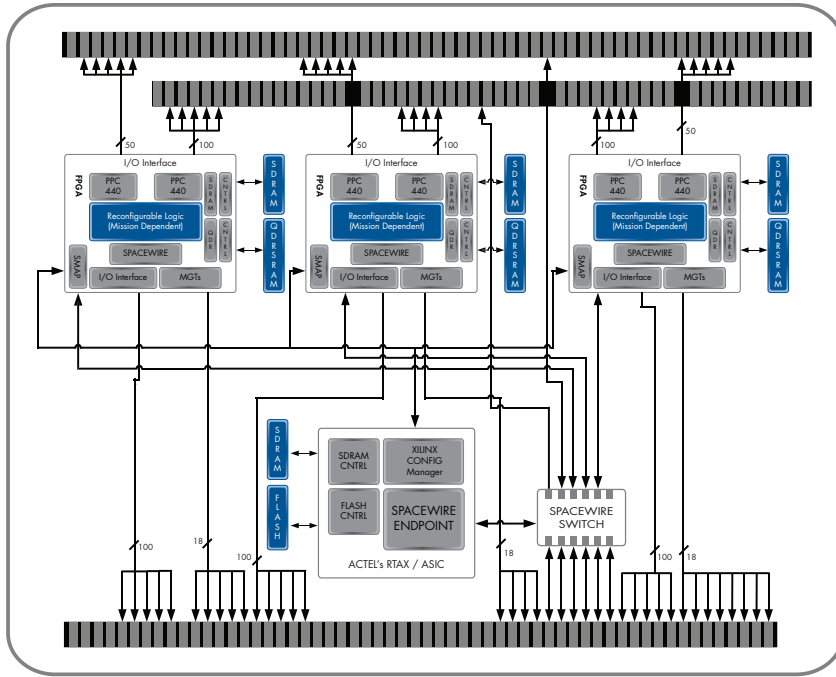
- Die and wafer sales
- Extreme environment solutions
- Custom screened products
- Foundry services

For more information, contact radstop@cypress.com.

RADIATION-HARDENED APPLICATIONS

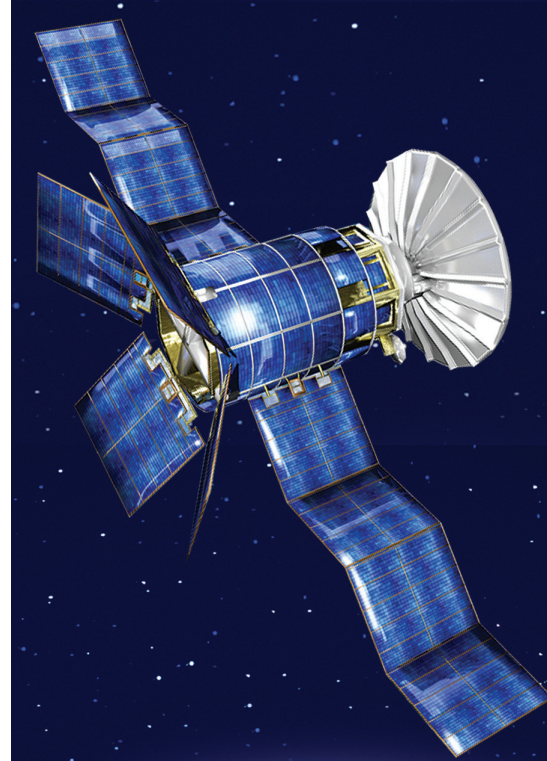
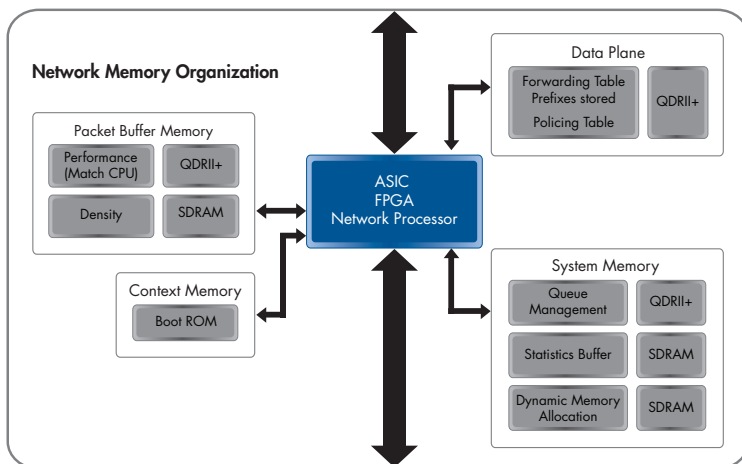
RECONFIGURABLE COMPUTING PLATFORM

Cypress's radiation hardened QDR-II+ SRAM is used as a data buffer for reconfigurable computing and matches or exceeds the frequency requirements of space grade FPGAs. Utilizing the QDR-II+ improves system performance by providing the industry's highest operating frequency of 250 MHz and throughput of 36 Gbps.



SPACE NETWORKING APPLICATIONS

Cypress's radiation-hardened QDR-II+ SRAM provides the high bandwidth, low latency, complete random access, and high bus utilization that space networking applications demand. The QDR architecture has been optimized for terrestrial networking applications, and now it is available for operation in space.



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