

SPACE CONFORMANT 1GB ETHERNET SWITCH DEVELOPMENT KIT

If you need a networking solution for mission-critical applications, COTS devices could put stress on your system and leave you open to hardware vulnerabilities.

DornerWorks Space Conformant 1Gb Ethernet Switch Development Kit can help your business develop a customized networking solution, primed and ready for space.

FRUSTRATION-FREE MISSION-CRITICAL NETWORKING



Complex technology requirements shouldn't hold you back from innovation.

Whether for a submarine fathoms deep, or a space system miles above, DornerWorks Space Conformant 1Gb Ethernet Switch keeps mission-critical devices connected in nearly any environment imaginable.

The development kit utilizes the Microchip RTG4 evaluation board, the ideal platform for space projects that need 1Gb networking capability to accelerate subsystem development, integration, and test.

Schedule a consultation with DornerWorks today so you can accelerate development, launch your space-bound products with confidence, and get back to growing your business.



EASY TO INTEGRATE FOR LIMITED RESOURCES

- Drop-in ready for space systems
- 90% power reduction over COTS devices
- Accelerate development



SAFETY-CRITICAL CERT. ARTIFACTS

- NASA standards
- ISO 9001 and AS9100
- ISO 13485



DEVELOPMENT KIT PRODUCT FEATURES

Data flow

- L2/L3 IP routing
- VLAN mapping
- Multicast: IGMP v3
- STP, RSTP
- SNMP v3

Accuracy

- NTP Client v4
- 588-2008, 2002

Management

- ACLS (L2 and L3)
- ARP
- Built-in self tests for Flash, DDR, PHYs
- Logging

Access

- Command line interface (CLI)

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DornerWorks is a professional, flexible,

AND AN *ESSENTIAL* PART
OF OUR TEAM "



CASE STUDY

RAD-HARDENED NETWORKING

Not satisfied with the limitations of status quo processors, one aerospace company decided on a radiation-hardened platform for its network switch, which would improve the quality of life for people in space. For their custom IP needs, they chose DornerWorks.

DornerWorks FPGA team guided the customer to:

- Microchip's RTG4 radiation tolerant FPGAs rather than a strict software approach.
- Custom IP for the FPGA, meeting the IEEE 1588 Precision Time Protocol standard for networking.
- RISC-V softcore processors leveraging a modified version of DornerWorks MAC IP core.

Being compatible with the end-users' commercial devices, this product strengthened the customer's hold on the aerospace market. And flexible data rights for the finished product give them full ownership of their own innovation.



YOUR DEVELOPMENT KIT INCLUDES

- 4-port FMC Card with Microsemi (Microchip) VSC8541 PHYs
- 8Gb Flash FMC card with MT29F8G08ABABA
- Microsemi RTG4 development board
- DornerWorks SW/FPGA IP Build
- Dev kit quick start test
- User Manual (with Quick Start Guide)

Optional (additional cost)

- Design and Verification Artifacts
- FPGA/SW IP for custom hardware
- Porting and integration support



The development kit is expandable to 8 Ethernet ports based on IP.

GET THE DEVELOPMENT KIT TODAY



Connect with us now. Together we will map out a plan that meets your product goals and helps you lead the market.



SCHEDULE A CONSULTATION

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