Mission computer

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Systems & Integration Solutions

3000 SERIES

FastCluster 3000 SERIES hybrid computing solutions integrate the Freescale 8641D Multicore general purpose processor (GPP), Xilinx Virtex-5 FPGA and Myricom's 10-Gigabit Ethernet Myri-10G clustering technology on a VXS platform to deliver optimal balance between performance, interoperability, and flexibility. Open platform supports single and multiple chassis.

The hybrid computing software development environment supports a broad set of libraries, diagnostics, and tools that include the Annapolis CoreFire Development Suite for Xilinx FPGA, Wind River's Workbench open device software development suite for VxWorks & Linux for the PowerPC with AltiVec, VSIPL object oriented middleware, Myricom's 10-Gigabit Ethernet stack and MPICH-MX over Myri-10G clustering fabric.

FEATURES:

→ Scalable Platform with 10-Gigabit switch fabric on VXS serial backplane and static switch for RocketIO

→ Air & Conduction Cooled VXS payload Blades: PowerPC Blades and Hybrid Blades (GPP, FPGA) with PMC/XMC support

→ Air & Conduction Cooled VXS Switch Modules with 16 port Myri-10G Switch (20 GBytes/s bi-section bandwidth)

→ Rugged systems with Built-in 10 GbE for sensor I/O and interoperability supporting systems of systems

→ Designed to MIL specs for shock, vibration, and EMI when space, power, weight, and cooling are at a premium

→ High Availability provided by Control and Management Planes coupled with fault detection and live insertion