GE
Intelligent Platforms

CRS-D8I-3VF1 COTS Rugged System

3U VPX Application Ready Data Processing System

Features

- **1/2 ATR rugged forced air cooled solution**
  - 8 slot 3U VPX
  - MIL-DLT-38999 connectors
- **Intel 3rd Gen Quad Core i7 @ up to 2.1 GHz**
- **Linux operating system (Windows also available)**
- **I/O capabilities**
  – MIL-STD-1553
  – ARINC 429
  – Serial
  – Discrete
  – USB
  – Optional VGA and DVI
  – Audio
  - Ethernet
  - GPIO
- **Designed for:**
  – Civilian and military UAVs
  – Over- and underwater research vessels
  – Ground vehicles
  – Helicopters
  – Manned commercial and military aircraft

GE Intelligent Platforms' CRS-D8I-3VF1 COTS Rugged System is a 1/2 ATR packaged prevalidated VPX computer system with an Intel-based processor single board computer. This data processing system provides a rugged and highly flexible computing platform suited for applications requiring rock-solid reliability such as civilian and military UAVs, manned commercial and military aircraft, helicopters, over and underwater research vessels, and ground vehicles.

The CRS-D8I-3VF1 VPX system's I/O flexibility is capable of meeting any number of configurations. It is designed to support GEIP's Intel Sandy & Ivy Bridge Core i7 3U SBCs, Gigabit Ethernet switch, video compression card, CUDA-based graphics cards, and a MIL-STD-1553/ARINC429 multi-protocol card.

GE's COTS-based Application Ready computer system can be deployed in the field as soon as your application is ready, or use our COTS Rugged Systems as a starting point for multiple application specific configurations.

The arduous task of integrating off the shelf boards has already been done for you— shortening your time to project completion. You have one point of contact for all issues and a single part number—not a collection of parts.

GE has integrated and tested the CRS-D8I-3VF1 and provides Board Support Packages (BSP's) and drivers that you can easily use to integrate your application and reduce your software development cycle time.

To help jump start your project, GE offers Laboratory Development Units, or starter kits, pre-configured for development purposes. Based on the required system controller architecture and bus system, GE can provide the appropriate development system for your specific needs.

Product Lifecycle Management

GE offers a Product Lifecycle Management (PLM) program of innovative Long-Term Support services to reduce the overall cost of ownership and provide industry-leading safeguards against component obsolescence. GE Intelligent Platforms is committed to supporting customer programs throughout their lifecycle.

CRS-D8I-3VF1 COTS Rugged System

Specifications

Processor
- Intel 3rd Gen Quad Core i7 @ up to 2.1 GHz
  Up to 3 SBCs per sub-system

SBC RAM
- Up to 8 GB DDR3 per SBC

SBC Flash Memory
- Up to 32 GB NAND Flash per SBC

Additional Memory
- Internal SATA Solid State Drive (up to 1TB)

Operating System
- Linux Fedora 14 (Windows also available)

Cooling
- Forced Air Cooled

Form Factor
- 3U VPX

Slots
- 8

Dimensions (H x W x D, excludes connectors)
- 7.8 x 5.25 x 15.9 (inches)
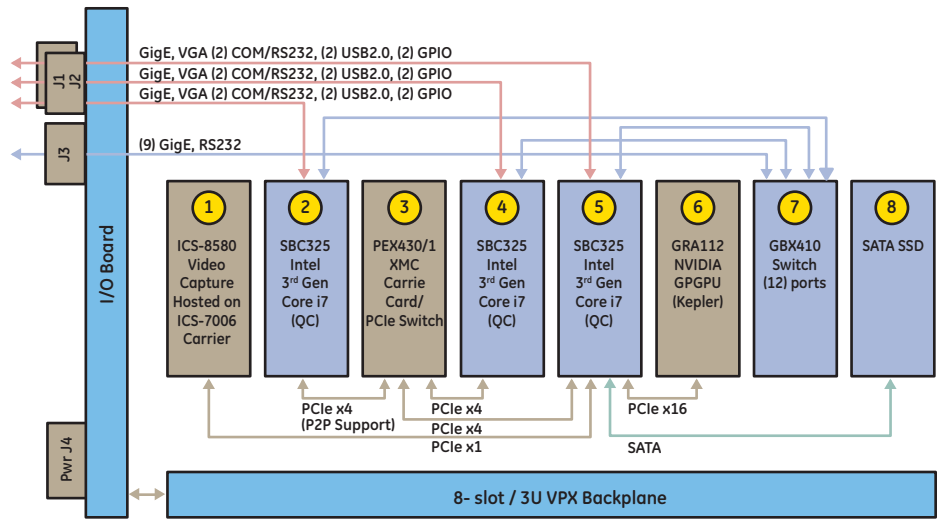 198 x 133 x 404 (mm)

Weight
- 22 lbs (~9.98 kg)

Input Power (MIL-STD)
- 28VDC (MIL-STD-704A*)
- 115VAC optionally available

*holdup time depends on processor usage

Block Diagram

Ordering Information

CRS-D8I-3VF1   900-100935-000

1/2 ATR rugged subsystem consisting of 3xSBCs, an Ethernet switch, and a solid state drive. Powered by a 28 VDC power supply.

About GE Intelligent Platforms

GE Intelligent Platforms is a division of GE that offers software, control systems, services, and expertise in automation and embedded computing. We offer a unique foundation of agile and reliable technology providing customers a sustainable competitive advantage in the industries they serve, including energy, water, consumer packaged goods, oil and gas, government and defense, and telecommunications. GE Intelligent Platforms is headquartered in Charlottesville, VA. For more information, visit www.ge-ip.com.

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