GE
Intelligent Platforms

FACEREF1

FACE Software Reference Platform

Processor
- 1.2 GHz QorIQ P4080
- Eight e500mc cores
- 2 GB dual-channel DDR3
- 4 GB NAND flash
- x4 PCIe to graphics

Graphics
- S3 2300E GPU
- 256 MB DDR3

I/O
- 2 independent channels video out
- DVI or VGA
- 3x 1000BASE-T Gigabit Ethernet
- 2x USB 2.0
- 2x RS-232
- TV capture

Compatible Software
- Wind River Hypervisor
- Presagis OpenGL
- Presagis VAPS XT

FACEREF1 is a rugged software reference platform comprising COTS boards packaged in a proven chassis design.

The processor module used in FACEREF1 is the SBC312. Based on the Power Architecture P4080 the SBC312 offers a huge leap in processing performance, providing eight processing cores within the power envelope of previous dual core boards. Combined with extensive IO, the SBC312 is ideal for a wide range of high performance Mil/Aero applications.

Features of the QorIQ P4080 processor
- System on Chip (SoC) processors with eight high-performance e500 cores built on Power Architecture Technology
- 45 nanometer technology delivers unprecedented performance per watt enabling power-efficient designs.

The graphics in FACEREF1 is provided by the PMCCG1. The S3 2300E GPU is a perfect balance between high performance and low power for many military and aerospace applications. It provides 256 Mbytes of DDR2 local memory.

The interface between the CPU and GPU is via a 4-lane PCI Express to PCI-X bridge, allowing high-bandwidth connectivity between the two processors.

The Future Airborne Capability Environment Consortium is leading the development of open standards for avionics systems. The intention of the standard is to bring interoperability and portability of applications, as well as ensuring a robust architecture and quality software development.

The FACE architecture is intended to drive more capabilities to the Warfighter, faster, while stimulating innovation within the avionics industry.

FACEREF1 is intended to provide a platform for customers to try COTS software, develop application code, and demonstrate capabilities on a rugged platform that is capable of being deployed on real airborne platforms.

FACEREF1 Reference Platform

Specifications

Processor

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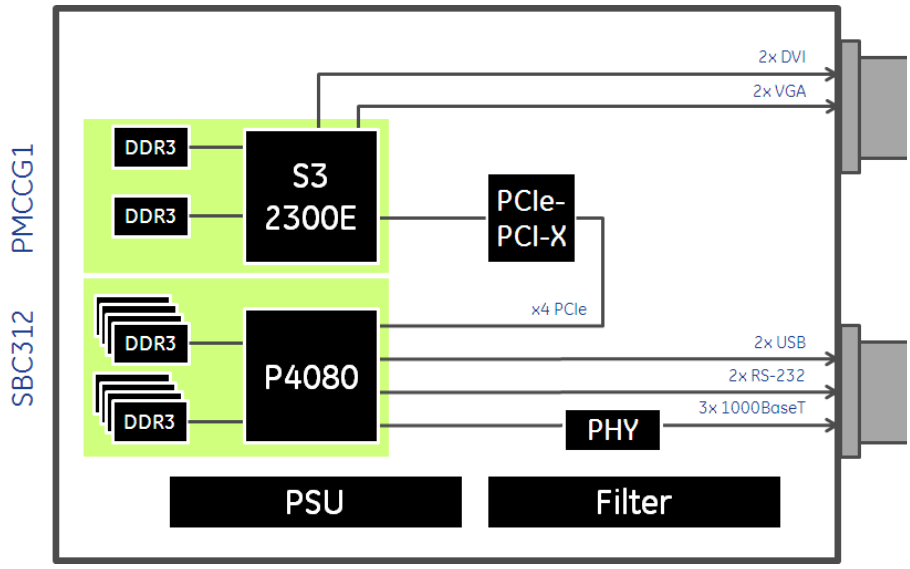
Environment

- Baseplate cooling
- Operating Temperature: -40°C to +65°C
- MIL-STD-704 28V DC input

Block Diagram



Ordering Information

FACEREF1 – 4 1 1 0 0 0 0 0 1

- 1: Software: VxWorks bootrom
- 0: Baseplate-cooled
- 0: Reserved
- 0: Reserved
- 0: Reserved
- 0: Reserved
- 1: PMCCG1-411001
- 1: SBC312-41310A31
- 4: Level 4 card set

Contact GE for other display and processing configurations.

About GE Intelligent Platforms

GE Intelligent Platforms, a General Electric Company (NYSE: GE), is an experienced high-performance technology company and a global provider of hardware, software, services, and expertise in automation and embedded computing. We offer a unique foundation of agile, advanced and ultra-reliable technology that provides customers a sustainable advantage in the industries they serve, including energy, water, consumer packaged goods, government and defense, and telecommunications. GE Intelligent Platforms is a worldwide company headquartered in Charlottesville, VA and is part of GE Home and Business Solutions. For more information, visit defense.ge-ip.com.

GE Intelligent Platforms Contact Information

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