Electronic Attack Processor

PRODUCT DESCRIPTION

The Electronic Attack Processor is a custom form factor board designed for processing application and driving multiple interfaces. The board is designed as conduction-cooled board for better cooling. The board uses FPGA’s input/output banks to drive multiple interfaces. It also features two on-chip PowerPC processors for high end processing application.

The board is used in Electronic Warfare application.

KEY FEATURES

- FPGA IOs to drive multiple interfaces
  - Two Fast Ethernet PHYs (10/100 Mbps)
  - RS232 interface
  - RS422 drivers & RS422 receivers
  - LVTTL / TTL Transceivers
- Multiple onboard clocks

SPECIFICATIONS

FPGAs / Processor

- Xilinx Virtex-5 FX130T FPGA with two PPC440 Embedded Processors

Interfaces

- Two 10/100Mbps Fast Ethernet links on RJ45 and Micro-D connectors
- Interfaces terminated on Micro-D connectors
  - 48 RS422 drivers
  - 24 RS422 receivers
  - 48 LVTTL / TTL transceivers
  - 10 RS232 serial links
  - JTAG programming interface

Software / IP

- Test software for validation

Additional Information

- 256 MB DDR2 SDRAM (2 x 64M x 16)
- 2 MB Asynchronous SRAM (512K x 32)
- 64 MB NOR Flash (4 x 8M x 16) for PPC440 cores
- 16 MB Configuration PROM (8M x 16) and JTAG for FPGA programming
MECHANICAL

- Conduction-cooled enclosure in custom form factor

POWER CONSUMPTION

- The unit consumes 25W
- Input voltage 5V fed through Micro-D connector

ENVIRONMENTAL

- Qualification: Passed stringent qualification criteria involving tests like vibration, mechanical shock, acceleration, thermal cycling, Humidity, Salt fog, Transit drop and bench handling.
  EMI/EMC: MIL-STD-461E
- Temperature range: −40°C and +85°C (Storage)
  −40°C and +60°C (Operational)

PART NUMBER(S)

| CH1050 | Electronic Attack Processor |