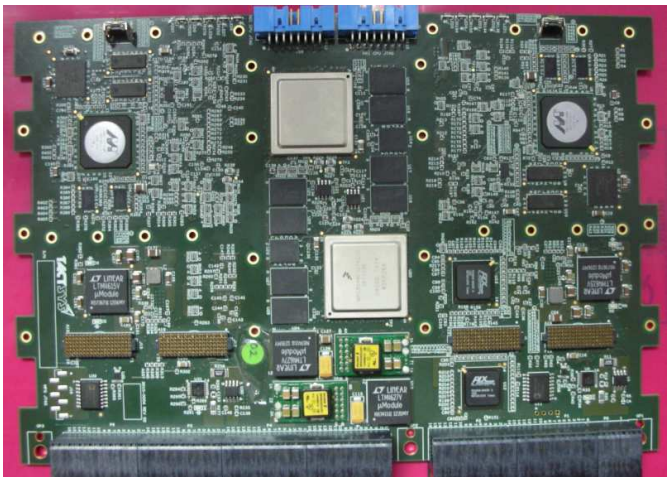
DATASHEET

MPC8548

TactSys's 6U VPX based SBC uses MPC8548E, PowerQUICC-III PowerPC and provides high levels of on-board functionality and integration combined with low power dissipation. It can achieve a processing speed of 1.2 GHz and 333.3 MHz of core complex bus (CCB) and DDR-2 memory speeds, with advantage of low power and small form factor requirements mostly matching in military applications.



MPOC8548E processor includes an e500 System-on-Chip (SoC) integrating both an L1 cache with 32 KB instruction and 32 KB data and a 512 KB L2 cache.1 GB DDR2 memory with ECC is provided necessary for most of system applications. Its GPIOs is routed to backplane to give flexibility for system designer to use it for General purpose use and Four Gigabit Ethernet ports, two high-speed serial communications ports. With its two XMC slot, either air- or conduction-cooled, accommodates additional modules and on-board functionality. It provides one PCI Express lanes which can be configured as master or slave. One watchdog is provided inside the CPU and another is provided with on board CPLD. Both are programmable and can generate master interrupt to reset whole board.

Ordering Information
Part Number 2010-0002-00

TACTICAL SYSTEMS

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San Jose,
CA 95129
Phone: (408) 216-7027

#12, 2nd Floor, 13th Main Vasanthnagar
Bangalore 560 032
Phone 91 80 4112 0887

DATASHEET

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SPECIFICATIONS

- Rugged 6U VPX SBC
- Ideal for DO-178/DO-254 Applications
- PowerQUICC-III MPC8548E @ 1.2 GHz
- 400 MHz Core Complex Bus (CCB) Speed
- Two Standard XMC Slots
- 1GB of DDR2 SDRAM at 400MHz with ECC
- 128 MB User Flash Memory
- 64 MB User Protected Flash Memory
- Four 10/100/1000 Mbps Ethernet Ports
- Two USB 2.0 Ports
- Two Async RS-232/422/485 Ports
- Eight Single Ended TTL or Four RS-422/485 Differential Discrete I/O Lines
- Four High Performance DMA Engines
- Four Timers (Internal to the CPU)
- Three Watchdog Timers, Elapsed Time Recorder
- Real Time Clock
- Two On-board Temperature Sensors
- VxWorks 6.x RTOS Support
- Linux RTOS Support
- Conduction and Air Cooled Versions

DATASHEET

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BLOCK DIAGRAM