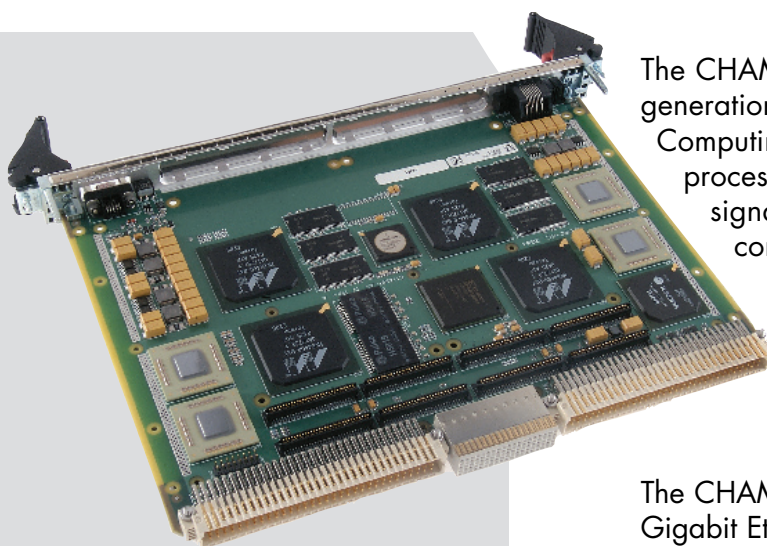




# CHAMP-AV IV Quad PowerPC™



The CHAMP-AV IV is supported with operating systems including VxWorks, Linux, INTEGRITY and Gedae. Curtiss-Wright provides signal processing libraries and a high performance Inter-Processor Communications Library for message passing and bulk data transfers, which extends to multi-board systems utilizing StarFabric.

The CHAMP-AV IV quad PowerPC board is the third generation of Curtiss-Wright Controls Embedded Computing family of QuadFlow architecture multi-processor boards. Designed for radar, sonar and signal intelligence applications, the CHAMP-AV IV combines the performance of four 7447A/7448 processors up to 1.25GHz, with a non-blocking PCI architecture. Each processor is equipped with 256 or 512Mbytes of DDR SDRAM, and two 800MB/sec (peak) connections to the other processor nodes.

The CHAMP-AV IV will easily integrate into systems using Gigabit Ethernet for command and control. The on-board Gigabit Ethernet switch provides direct network access to all of the processors. The on-board switch permits many CHAMP-AV IV boards to be chained together, eliminating or reducing the cost of external Gigabit Ethernet switching.

The CHAMP-AV IV is suited to large multi-slot systems with support for CWCECs StarLink II PMC, providing high-speed StarFabric interconnect within systems comprised of CHAMP cards and single-board computers.

For more information on our broad range of high-integrity computing solutions, please visit our website at [www.cwembedded.com](http://www.cwembedded.com).

**CURTISS  
WRIGHT** Controls  
Embedded Computing

# CHAMP-AV IV Quad PowerPC™

## Features

- ◆ Four PowerPC™ 7447A/7448 CPUs up to 1.25 GHz
- ◆ 40 GFLOPs peak computational power
- ◆ QuadFlow architecture with 3.2 GB/s peak on-board throughput
- ◆ Up to 512 Mbytes DDR-250 SDRAM with ECC per processor (2 Gbytes total)
- ◆ 256MB Flash with write protection
- ◆ 128 Kbytes NVRAM
- ◆ Gigabit Ethernet (GbE) with on-board switch
  - Each node has connection to on-board GbE switch
  - Two ports from GbE switch available externally
  - Front panel and backplane routing options
- ◆ VME interface with 2eSST support
- ◆ Support for two 64-bit, 100 MHz PCI-X mezzanine modules (PMC-X)
- ◆ Four EIA-232 serial ports, one per processor node
- ◆ Support for StarFabric PMC modules with differential routing to backplane
- ◆ Multi-board synchronous clock feature
- ◆ Eight discrete LVTTTL I/O signals, 2 selectable as interrupt inputs
- ◆ VxWorks® Board Support Package
- ◆ Linux support
- ◆ Green Hills INTEGRITY Board Support Package
- ◆ Inter-Processor Communications Library
- ◆ Optimized AltiVec DSP function library
- ◆ Range of air and conduction-cooled ruggedization levels available

