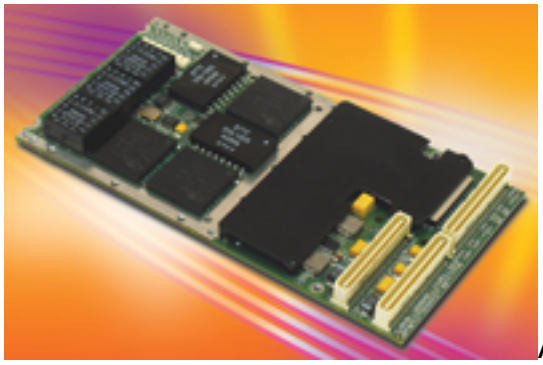
# Multi-I/O PMC for Diverse I/O Requirements



Aitech Defense Systems offers a multi-I/O PMC that provides a variety of configuration options for different I/O environments. The low power, single-width M705 features PMC density with up to five dual channel, dual-redundant MIL-STD-1553B channels, 16 ARINC-429 receive channels and eight ARINC-429 transmit channels, up to six RS-232/422/485 serial channels and eight opto-isolated digital discrete input channels, all of which reduce the number of I/O cards when developing subsystems.  Additional board options include an ARINC 708 Weather Radar interface contained as VHDL within the large on-board FPGA. The extensive number and types of channels available on the new PMC, coupled with its low power consumption of typically <7.5W and exceptional shock and vibration resistance, make the M705 appropriate for a diverse range of I/O applications. The MIL-STD-1553 (STANAG 3838) channels support BC/RT/MT operation modes and offer 128K bytes (64K words) of dual-port RAM per channel. All ARINC-429 channels fully comply with the AEEC adoptions of the ARINC-429 specifications and provide both high and low speed operation, 100 kbps and 12.5 kbps respectively. The six UART channels feature a global interrupt source register and two of the channels can provide full modem flow control lines (RTS, CTS, DTR and DSR). The discrete input channels serve as general purpose I/O ports that connect to the GPIO FPGA, but are primarily used to externally assign the RT address to the MIL-STD-1553 channels. The M705 has a 32-bit/66 MHz PCI 2.2 interface that supports both +5 V and +3.3 V PCI universal signaling levels. The conduction-cooled version per ANSI/VITA 20-2001 routes all signals to the rear P4 connector and the IEEE 1386-2001 air-cooled version can be equipped with connectors for front panel I/O signal routing. Pricing starts at $3,650.

**Aitech Defense Systems**
888-248-3248, www.rugged.com [1]

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