



# MPMC-9350

## Multi-Platform Mission Computer 5-slot 3U CPCI System

### Processing

- ◆ Intel Core Duo or PowerPC 7448

### Optional Interfaces

- ◆ MIL-STD-1553 – Up to two dual redundant channels
- ◆ ARINC 429 – Up to 32 channels
  - Individually selectable as Rx or Tx
- ◆ Video up to four outputs
  - DVI, LVDS or VGA
  - Optional PowerPC video processor
- ◆ Video input, up to six channels
  - (NTSC, PAL, RS-170)

### 3U CPCI Backplane

- ◆ 5-slot 66 MHz/32-bit

### Mechanical

- ◆ Volume optimized
- ◆ Weight fully populated – 16 lbs
- ◆ L x W x H – 10.72" x 5.11" x 7.62"

### Power Supply

- ◆ 28 VDC input per MIL-STD-704E, DO-160E

Curtiss-Wright Controls Embedded Computing's (CWCEC's) MPMC-9350 has the interfaces that a mission computer requires, backed by unprecedented processing power and the flexibility to exactly meet the needs of deployable systems.



The MPMC-9350 is designed to meet the harsh environments of many military and commercial computing applications. Circuit cards installed in the system enclosure are isolated from external environmental conditions such as humidity, dust and sand.

Cooling is accomplished by thermal transfer between the card edges of the conduction-cooled 3U CompactPCI (CPCI) cards and the side walls of the system enclosure. EMI filters and gaskets are employed for system security and increased reliability.

The main processing power of the MPMC-9350 is supplied by a DCP-1201 (Intel® Core™ Duo) single board computer (SBC) or the DCP-124 (PowerPC™, 7448) SBC.

The MPMC-9350i has a full selection of standard and optional I/O. The standard I/O includes Ethernet, RS-232 serial, RS-422 serial, USB, SATA and DIO.

Two dual redundant channels of MIL-STD-1553 can be supplied via a 1553 PMC module.

32 channels of ARINC 429 can be provided via a 429 PMC with each channel individually selectable as Rx or Tx.

Up to four video outputs can be generated in DVI, LVDS, RS-170 and VGA formats by one or two PMC-704 video PMCs and can be hosted by the system controller or by dedicated DCP-124P SBC. Up to six NTSC or RS-170 video inputs can be captured (two channels simultaneously).

Learn More

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Sales Email: [sales@cwembedded.com](mailto:sales@cwembedded.com)

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# MPMC-9350

## Standard Features

The MPMC-9350 comes in several fully developed configurations utilizing either Intel or PowerPC based processor solutions for the system controllers. These pre-developed system solutions integrate many features that are found to be common for mission critical or video display systems such as MIL-STD-1553, ARINC 429, Ethernet Switching & Video capabilities. Contact your local CWCEC representative for more information on how these fully developed system configurations can meet your program requirements.

## Custom Variations

The MPMC-9350i can be ordered as a modified commercial off the shelf (MCOTS) product with a modified front panel connector set, modified backplane wiring or a modified card set so it will fit your exact needs.

## Environmental Qualification

The MPMC-9350 is designed to meet the harsh environments of many military and aerospace computing applications. To ensure the highest level of performance, the MPMC-9350 has been designed to meet or surpass the DO-160F Environmental Conditions for Airborne Equipment. It has been designed to pass numerous environmental tests including Temperature, Altitude, Shock, Vibration, Fluid Susceptibility, Voltage Spikes, Electrostatic Discharge and more. Circuit cards installed in the sealed compact chassis are completely isolated from external environmental conditions such as humidity, dust and sand.

## Curtiss-Wright Controls Embedded Computing

Whether the intent is to maximize COTS content or leverage an existing custom solution, CWCEC is your embedded systems partner. Take advantage of our decades of experience in assembling generic platforms, upon which you can build your applications. Or leverage specific system solutions that focus on addressing full compliance to platform/program requirements. Either way, we have the products, open standard technologies and system platforms to keep your program ahead of schedule and on budget. Your success is the standard upon which we base our performance.

Table 1: Qualification Testing Performed on the MPMC-9350

DO-160F Test Name	Category
Temperature/Altitude	B1
Temperature Variation	B
Humidity	B
Operation Shocks	B
Crash Safety	B
Vibration	S
Waterproofness	W
Fluid Susceptibility	F
Fungus Resistance	F
Magnetic Effect	A
Power Input	Z
Voltage Spike	A
Audio Frequency Conducted Susceptibility	Z
Induced Signal Susceptibility	C
RF Susceptibility	Y
Emission of RF Energy	M
Lightening Induced Transient Susceptibility	A3E3
Electrostatic Discharge	A