

Photo courtesy of
General Dynamics
Land Systems Inc.

Fact Sheet



MPMC-9350-0003

Multi-Platform Mission Computer

5-slot 3U cPCI System

Form Factor

- ◆ 3U CompactPCI (cPCI) backplane

Mechanical

- ◆ Forced air cooling
- ◆ Volume optimized
- ◆ 10.72" x 5.11" x 7.62"
- ◆ 17 lbs (fully populated)

Standard Configuration

- ◆ (3) DCP-124 SBC
 - Freescale™ MPC7448
- ◆ (2) DPMC-706 Video
- ◆ (1) DPMC-601 1553
- ◆ (1) ARINC 429 card

Power Supply

- ◆ 28 VDC input
- ◆ MIL-STD-704 compliant

Table 1: Max Power

System Component	Power	Qty	Total
DCP-124	27 W	3	81 W
DPMC-706	10 W	2	20 W
DPMC-601	7 W	1	7 W
ARINC PMC	10 W	1	10 W
Fan Assembly	20 W	1	20 W
Power Supply	20 W	1	20 W
Total Power Required			158 W

The Multi-Platform Mission Computer 9350-0003 solution accommodates the highest power 3U cards in the embedded computing market within a 5-slot forced air enclosure. The MPMC-9350-0003 is backed by unprecedented processing power and the flexibility to exactly meet the needs of deployable systems. It's designed to meet the harsh environments of many military computing applications. Circuit cards installed in the system enclosure are isolated from external environmental conditions such as humidity, dust and sand.

Optimal system cooling is ensured via thermal transfer between card edges of its conduction cooled 3U cPCI cards and the side walls of the system enclosure. EMI filters and gaskets are employed for system security and increased reliability (see Table 2).



Learn More

Sales Info: sales.cwembedded.com

Sales Email: sales@cwembedded.com

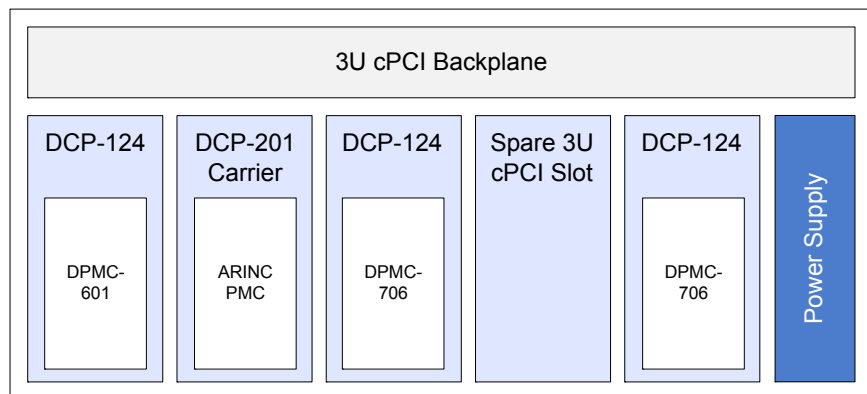
ABOVE & BEYOND

**CURTISS
WRIGHT** Controls
Embedded Computing
cwembedded.com

Standard Configuration

The MPMC-9350-0003 is equipped with an integrated 28 VDC power supply unit, three DCP-124 SBCs, two DPMC-706 video cards, one DPMC-601 1553 card, and one AIM ARINC card.

Figure 1: MPMC-9350-0003 Block Diagram



Environmental Qualification

The MPMC-9350-0003 is designed to meet the harsh environments of many military and aerospace computing applications. Table 2 illustrates the environmental qualification standards the MPMC-9350-0003 has been designed to meet or exceed.

Table 2: Environmental Specifications

Environmental Condition	Testing Compliance
Temperature & Altitude/Var	DO-160F, B1
Humidity	DO-160F, B
Operational Shocks & Crash Safety	DO-160F, B
Vibration	DO-160F, S
Fluid Susceptibility	DO-160F, F
Fungus Susceptibility	DO-160F, F
Magnetic Effect	DO-160F, A
Power Input	DO-160F, Z
Voltage Spike	DO-160F, A
Audio Freq Susceptibility	DO-160F, Z
Emissions	DO-160F, M
RF Susceptibility	DO-160F, Y
Lightening Strike	DO-160F, A3 E3
ESD	DO-160F, A

Table 3: Verified System Interfaces

Tested Interface	Qty	Tested Interface	Qty
Gigabit Ethernet	6	ARINC 429 Tx	8
RS-232	3	LVDS or DVI	4
RS-422	6	VGA	4
MIL-STD-1553	2	USB 2.0	2
ARINC 429 Rx	24	DIO	9

Curtiss-Wright Controls Embedded Computing

Whether the intent is to maximize COTS content or leverage an existing custom solution, Curtiss-Wright is your Embedded Systems partner. Take advantage of 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.