



# MPMC-9320-0008

## Multi-Platform Mission Computer

### 2-slot 3U cPCI System

#### Form Factor

- ◆ 3U CompactPCI (cPCI) backplane

#### Mechanical

- ◆ Natural convection cooling
- ◆ Volume optimized
- ◆ 9.1" x 5.0" x 5.1"
- ◆ 14.5 lbs (fully populated)

#### Standard Configuration

- ◆ (1) DCP-124P SBC
  - PowerPC™
- ◆ (1) DPMC-2503 Audio PMC

#### Power Supply

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

Table 1: Max Power

System Component	Power	Qty	Total
DCP-124P	27 W	1	27 W
DPMC-2503	15 W	1	15 W
Power Supply	8 W	1	8 W
<b>Total Power Required</b>			<b>50 W</b>



The MPMC-9320-0008 provides the highest functional density available in a small package. As a natural convection cooled system, the MPMC-9320-0008 is designed for reliable operation in harsh environments without the need for base plate or forced air cooling.

Packaged in an ultra compact 3U cPCI form factor and equipped with reliable PowerPC™ processing, the MPMC-9320-0008 has all the elements required of modern mission computers in space constrained applications (see the chart on the following page for an exact list of interfaces that have been tested and verified).

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 the environmental qualification chart on the following page for more information).

#### Learn More

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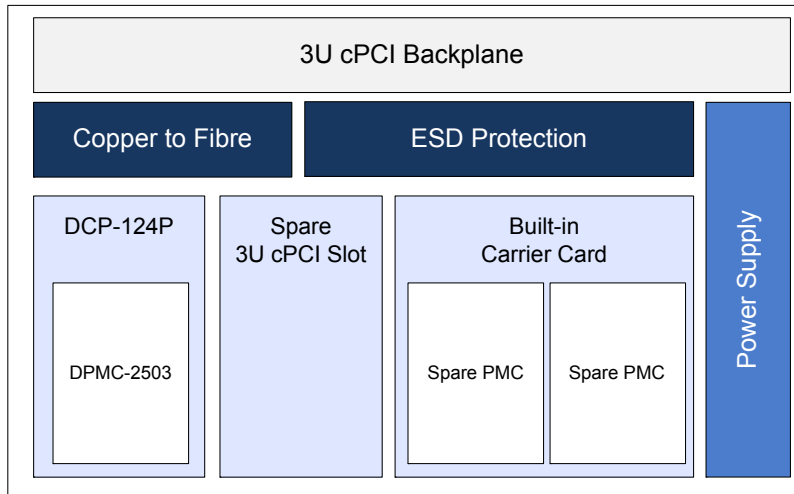
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## Standard Configuration

The standard system configuration of the MPMC-9320-0008 is equipped with an integrated 28 VDC power supply unit, one DCP-124P SBC, and one DPMC-2503 Audio PMC.

Figure 1: MPMC-9320-0008 Block Diagram



## Environmental Qualification

The MPMC-9320-0008 is designed to meet the harsh environments of many military and aerospace computing applications. Table 2 illustrates the environmental qualification standards the MPMC-9320-0008 is designed to meet or exceed.

Table 2: Environmental Specifications

Environmental Condition	Testing Compliance
Temperature & Altitude	MIL-STD-810F, 501.4 (high temp) MIL-STD-810F, 502.4 (storage temp, operation) MIL-STD-810F, 500.4 (alt extremes)
Temperature Variation	MIL-STD-810F, 503.4 (temperature shock, 60°C/15 seconds (+20 to -40°C))
Operational Shocks & Crash Safety	MIL-STD-810F, 516.5 (shock)
Vibration	MIL-STD-810F, 514.5 (vibration)
Explosion Proofness	MIL-STD-810F 511.4

Table 3: Verified System Interfaces

Tested Interface	Qty
Fiber Gigabit Ethernet	1
RS-232	1
Microphone Sensor Nodes	10

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