



# MPMC-9310-0001

## Multi-Platform Mission Computer

### Single-slot 3U cPCI System

#### Form Factor

- ◆ 3U CompactPCI (cPCI) backplane

#### Mechanical

- ◆ Cold plate cooling
- ◆ Volume optimized
- ◆ 3.71" x 4.89" x 7.80"
- ◆ <5 lbs (fully populated)

#### Standard Configuration

- ◆ (1) DCP-124P SBC
  - PowerPC™ 7448
- ◆ (1) ARINC 429 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
ARINC PMC	7 W	1	7 W
Power Supply	6 W	1	6 W
<b>Total Power Required</b>			<b>40 W</b>



The MPMC-9310-0001 is the smallest member of the Multi-Platform Mission Computer family, weighing less than 5 pounds. Packaged in an ultra compact 3U form factor and equipped with reliable PowerPC™ processing architecture, the MPMC-9310-0001 has many of the elements required of modern mission computers (see Table 3).

The slim profile of the MPMC-9310-0001 allows the unit to fit easily into available nooks on any platform making it ideal for space constrained applications such as UAVs. Further, the MPMC-9310-0001 is a ruggedized cold-plate cooled system qualified for reliable operation in harsh environments (see Table 2).

#### Learn More

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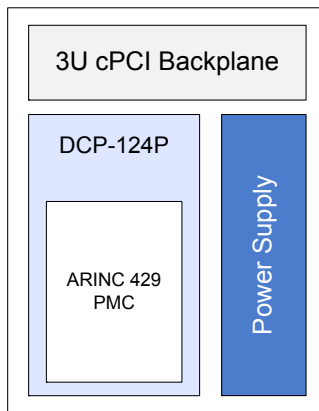
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## Standard Configuration

The MPMC-9310-0001 is equipped with an integrated 28 VDC power supply unit, one DCP-124P SBC, and one ARINC 429 PMC.

Figure 1: MPMC-9310-0001 Block Diagram



## Operating System

The MPMC-9310-0001 has been verified to run VxWorks®.

## Environmental Qualification

The MPMC-9310-0001 is designed to meet the harsh environments of many military and aerospace computing applications. Table 2 illustrates the environmental qualification standards the MPMC-9310-0001 has been designed to meet or exceed.

Table 2: Environmental Specifications

Environmental Condition	Testing Compliance
Power Input	MIL-STD-704F & MIL-HDBK-704-8: LDC102, LDC103, LDC104, LDC302, LDC602, RE102
EMI/EMC	MIL-STD-461F
Shock	MIL-STD-810F, 516.5
Vibration	MIL-STD-810F, 514.5
Salt Fog	MIL-STD-810F, 509.4
Temperature Altitude	MIL-STD-810F, 520.2
Radiated Emissions	MIL-STD-461: CE102, CS101, CS114, CS115, CS116, RE101, RE102, RS101, RS103

Table 3: Verified System Interfaces

Tested Interface	Qty	Tested Interface	Qty
Gigabit Ethernet	2	ARINC 429 Output	4
RS-232	3	LVTTL	6
RS-422	1	28V Discrete	4
ARINC 429 Input	4		

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