## Self-Contained Portable Computer with ATX Form-factor System Board



#### **Features**

- » Ruggedized portable computer with anodized aluminum chassis.
- » Supports ATX form-factor desktop and server system boards and configurable with latest Intel multi-core processors.
- » Desktop system board supports up to 32GB of system memory. Server system board supports up to 256GB of system memory.
- » PCI and PCI-Express slots for add-on cards.
- » 17" active matrix flat panel display, 1280x1024 resolution.
- » Four drive bays for data storage devices.
- » Fold-down keyboard with touchpad pointing device.
- » 650-watt ATX power supply standard, upgradable to 850 watts.
- » Includes towing case with wheels.

#### Self-contained Portable PC Solution

The MPC-9000 is a compact, self-contained portable computer ruggedized for mobile applications. The system enclosure is constructed of anodized aluminum alloy. Corner rubber bumpers adds to its protection against bumps and shock.

The enclosure features a 17-inch active matrix flat panel display, fold-down keyboard, touchpad mouse, four drive bays and a 650-watt ATX power supply. Internally, there is room for an ATX form-factor motherboard. A fully configured MPC-9000 provides a totally integrated portable system ready to be deployed in industrial environments such as telecom field service, data acquisition and test applications.

There is a durable, rubber-clad carrying handle on the top that makes carrying the system easy. A padded towing case with wheels and telescopic handle is included for long-distance transportation of the system.

### Expandable and upgradable system features

MPC-9000 is designed to take advantage of commercial-off-the-shelf components for its substantial expansion and upgrade capabilities. The motherboard supports current multi-core processors. There is PCI-Express x16 slot for upgrading graphics card when you need to run graphics intensive applications. Onboard SATA and RAID controllers give you the options of high data read/write speed and fault-tolerance. And four available drive bays lets you assemble your system with multiple hard drives RAID configuration.



## **System Chassis Specifications**

#### System Chassis

Chassis Construction Portable chassis constructed of aluminum alloy. Anodized aluminum exterior.

Integrated flat panel display and fold-down keyboard.

Rubber bumpers on corners. Rubber-clad carrying handle.

Tilt-up feet under chassis and keyboard.

Built-in speaker.

Integrated Display 17" TFT LCD, 1280 x 1024 resolution, 250 cd/m², 350:1 contrast ratio.

Storage Bays 2x 5.25" externally accessible drive bays.

1x 3.5" externally accessible drive bay.

1x internal 3.5" drive bay.

1x slim-type optical disk drive bay.

Add-on Card Support Chassis supports up to seven expansion cards.

Number 1 slot\* supports expansion card length (length of PCB) up to 8.25"  $\,$ 

Number 2 ~7\* slot positions support expansion cards up to 13.3"

Keyboard Fold-down 108-key keyboard with positive tactile feedback keyswitches. Integrated touchpad pointing device.

Cooling Two 120mm case fans with filter. Dimensions 17.2'' (W) x 13.4'' (H) x 9.3'' (D).

Weight Approximately 35 lbs. with motherboard, hard drive, and power supply installed

### Electrical and Power

Input AC  $100 \sim 240 \text{ V} @ 50 \sim 60 \text{ Hz}$ , full range (PFC).

Output 650 watt ATX power supply standard, upgradable to 850 watt power supplies.

#### **Environmental**

Temperature Operating 0~50-C (32~122 -F); non-operating -20~60-C (-4~140 -F)

Humidity (non-condensing) Operating: 5~95% @ 40-C.

#### Note:

\* In most ATX form-factor motherboards, number 1 slot location is usually occupied by a x1 PCI-Express slot. Number 2 ~ 7 slot locations are usually occupied by x16, x8, x4 PCI-Express, or PCI slots. Available slots for add-on cards depends on specific motherboard and system configuration.



# **Quad-Core CPU System Configuration**

System Configuration with Intel Quad-Core Desktop Processor

System Board Intel Z77 chipset LGA 1155 system board.

Supports 4-Channel, dual-port Thunderbolt technology.

Processor Intel Core i7-3770 Ivy Bridge 3.4GHz quad-core processor with Intel HD Graphics 4000.

System Memory 8GB dual channel DDR3 DRAM installed, up to 32GB.

Graphics Controller Processor integrated Intel HD Graphics 4000.

Installed Storage One 320GB 7200 RPM hard drive.

One DVD +/- RW optical disk drive.

Storage Device Controller 4x SATA 3.0Gb/s ports.

4 x SATA 6.0Gb/s ports. RAID 0/1/5/10 support.

LAN Broadcom BCM57781 LAN controller, 10/100/1000Mbps.

Audio Realtek ALC898 7.1 channels audio controller.

Expansion Slots 2x PCI-E 3.0 x16 slots.

2x PCI-E 3.0 x1 slots.

2x PCI slots.

External Panel I/O Ports 1x PS/2 keyboard/mouse.

1x D-Sub. 1x HDMI.

1x DisplayPort Input for Thunderbolt port (TBT2 for test only).

2x USB 2.0. 4x USB 3.0. 1x eSATA 6Gb/s. 1x S/PDIF Out 5x audio ports.

Operating System Microsoft Windows 7 Professional 64-bit.

#### Note

Please use this as a starting point from which components can be modified to meet your application requirements.



# **Six-Core CPU System Configuration**

System Configuration with Intel Six-Core Server Processor

System Board Intel C602 chipset LGA 2011 system board.

Supports Intel Xeon E5-2600/E5-1600 series processors.

*Processor* Intel Xeon E5-2630 Sandy Bridge-EP 2.3GHz six-core processor.

System Memory 16GB ECC Registered DDR3 DRAM installed, up to 256GB.

Graphics Controller Integrated Matrox G200eW with 16MB DDR2 video RAM.

Installed Storage One Intel 335 Series 240GB SATA III MLC SSD.

One 1TB 7200 RPM 32MB Cache SATA 6.0Gb/s hard drive.

One DVD +/- RW optical disk drive.

Storage Device Controller 4x SATA 3.0Gb/s.

2 x SATA 6.0Gb/s.

RAID 0/1/5/10 support (Windows).
RAID 0/1/10 support (Linux).

LAN Dual 10/100/1000Mbps Ethernet.

Expansion Slots 1x PCI-E 3.0 x16 slot.

1x PCI-E 3.0 x8 (in x16) slot. 1x PCI-E 2.0 x4 (in x16) slot.

3x PCI-X 64bit slots.

External Panel I/O Ports 2x PS/2 ports.

1x COM port. 1x D-Sub VGA port. 2x USB 2.0 ports.

Operating System Microsoft Windows 7 Professional 64-bit.

#### Note

Please use this as a starting point from which components can be modified to meet your application requirements.

