MOXA®

MC-5150-DC-CP Series
Quick Installation Guide

Third Edition, August 2012

Overview

The MC-5150-DC-CP computer uses the Intel® Core™ i5 520E processor and come with 4 serial ports, 2 Gigabit Ethernet ports, and 6 USB hosts. The computer offer high performance and versatile peripherals for industrial applications.

Package Checklist

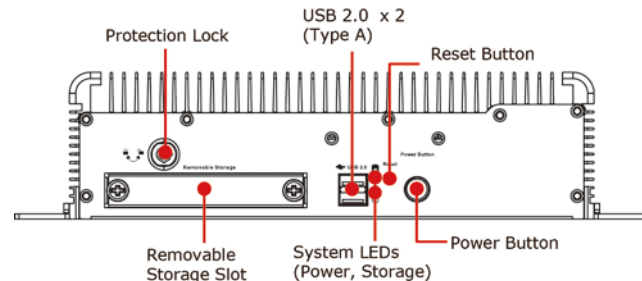Before installing the MC-5150-DC-CP, verify that the package contains the following items:

- 1 MC-5150-DC-CP embedded computer
- 2 removable storage protection keys
- 4 screws for internal and removable SSD
- Terminal block for power input
- Hard disk installation kit
- Documentation and driver CD
- Quick Installation Guide (printed)
- Warranty card
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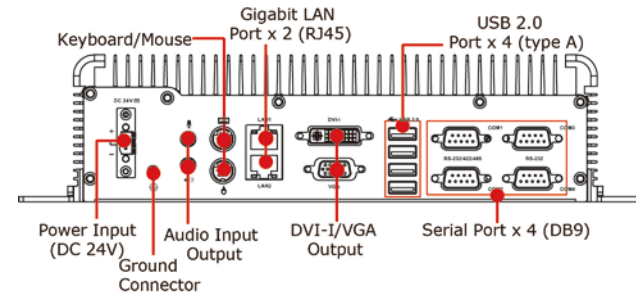**NOTE: Please notify your sales representative if any of the above items are missing or damaged.**

MC-5150-DC-CP Panel Layout

The following figures show the panel layouts of the MC-5150-DC-CP.

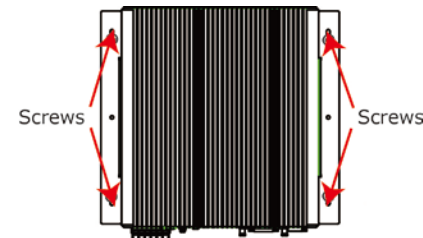### MC-5150-DC-CP Front View

MC-5150-DC-CP Rear View

LED Indicators

The following table describes the LED indicators located on the front panel of the MC-5150-DC-CP.

LED Name	LED Color	LED Function
Power	Green	Power is on and functioning normally
	Off	Power is off or power error exists
Storage	Red (on)	SSD card is inserted and detected
	Red (blinking)	SSD card is reading/writing
	Off	No activity
LAN	Green	100 Mbps Ethernet mode
	Yellow	1000 Mbps (Gigabit) Ethernet mode
	Off	No activity or 10 Mbps Ethernet mode

Installing the MC-5150-DC-CP

Wall or Cabinet Mounting

The MC-5150-DC-CP has been pre-installed with two brackets on both ends of the computer. Use two screws per side to attach the MC-5150-DC-CP to a wall or cabinet.

Connector Description

Power Connector

The MC-5150-DC-CP model has a 24 VDC power input (via the terminal block). If power is supplied properly, the Power LED will light up. The OS is ready when the Ready LED lights up to a solid green.

Grounding the MC-5150-DC-CP

Grounding and wire routing help to limit the effects of noise due to electromagnetic interference (EMI). Run the ground connection from the ground screw to the grounding surface prior to connecting the power.

> ⚠ **ATTENTION**
>
> This product is intended to be mounted to a well-grounded mounting surface, such as a metal panel.

Earth Ground: The MC-5150-DC-CP computer has an earth ground connector on the rear panel for grounding. There is an earth ground mark next to the connector. Connect the EG wire to an appropriate grounded metal surface.
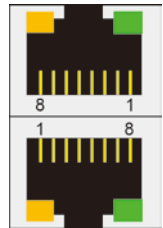
VGA and DVI-I Outputs

The MC-5150-DC-CP comes with a DE-15 female connector on the front panel to connect a VGA CRT monitor, and has a DVI-I (dual) connector on the front panel to connect displays over a Digital Visual Interface.

Ethernet Ports

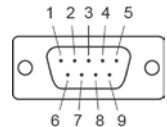The 10/100/1000 Mbps Ethernet ports use RJ45 connectors.

Pin	10/100 Mbps	1000 Mbps
1	ETx+	TRD(0)+
2	ETx-	TRD(0)-
3	ERx+	TRD(1)+
4	–	TRD(2)+
5	–	TRD(2)-
6	ERx-	TRD(1)-
7	–	TRD(3)+
8	–	TRD(3)-

Serial Ports

The serial ports use DB9 connectors. COM1 and COM2 support RS-232, RS-422, and RS-485, and COM3 and COM4 support RS-232.

Pin	RS-232	RS-422	RS-485 (4-wire)	RS-485 (2-wire)
1	DCD	TxDA(-)	TxDA(-)	–
2	RxD	TxDB(+)	TxDB(+)	–
3	TxD	RxDB(+)	RxDB(+)	DataB(+)
4	DTR	RxDA(-)	RxDA(-)	DataA(-)
5	GND	GND	GND	GND
6	DSR	–	–	–
7	RTS	–	–	–
8	CTS	–	–	–

Removable Storage Trays

The MC-5150-DC-CP computer has a removable storage device tray on the front panel, with a 64 GB solid state drive pre-installed. You may remove the SSD and replace it with another storage drive if you wish. In addition, an internal SATA expansion slot for additional drives is also available on the bottom of the computer. You may install either a hard disk drive or an SSD into the storage expansion slot; however, for high-vibration environments, Moxa recommends using an SSD for greater system stability. To increase system safety, protection keys are provided to lock the front panel's removable tray.

> ⚠️ **IMPORTANT!**
>
> Moxa is continually testing SSDs for compatibility with MC-51XX computers. As of June 2012, the Memoright MRSAJ6C064GC125C00 and Memoright MRSAD4B060GC225C00 models of SSD have been fully approved for use with MC-51XX devices. However, this is only a partial list and one that is continually growing; for a more up-to-date list of which SSDs are certified as compatible with MC-51XX computers, please contact Moxa's technical support team.

USB Hosts

The MC-5150-DC-CP has six USB 2.0 full speed hosts that use a type A connector. The port supports keyboard and mouse, and can also be used to connect a FlashDisk for storing large amounts of data.

Audio Interface

The MC-5150-DC-CP comes with an audio input and an audio output, allowing users to connect a speaker or an earphone.

Reset Button

Press the "Reset Button" on the front panel of the MC-5150-DC-CP to reboot the system automatically. The Ready LED will blink on and off for the first 5 seconds, and then maintain a steady glow once the system has rebooted.

Real-time Clock

The MC-5150-DC-CP's real-time clock is powered by a lithium battery. We strongly recommend that you do not replace the lithium battery without help from a qualified Moxa support engineer. If you need to change the battery, contact the Moxa RMA service team at http://www.moxa.com/rma/about_rma.aspx.

> ⚠️ **ATTENTION**
>
> There is a risk of explosion if the battery is replaced with an unapproved (off specifications) type of battery.

Powering on the MC-5150-DC-CP

To power on the MC-5150-DC-CP, connect the "terminal block to power jack converter" to the MC-5150-DC-CP's DC terminal block on the rear panel. Press the Power Switch button to turn on the computer. It takes about 30 seconds for the system to boot up. Once the system is ready, the Power LED will light up.

MOXA® **www.moxa.com/support**