# MC-5150-DC-CP Series Quick Installation Guide

Second Edition, July 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:

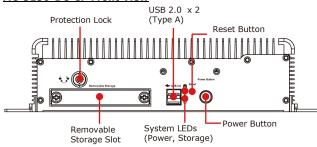
- 1 MC-5150-DC-CP embedded computer
- 2 removable storage protection keys
- 8 screws for internal and removable SSD
- Terminal block for power input
- Hard disk installation kit
- Documentation and driver CD
- Quick Installation Guide (printed)
- Warranty card
- •

NOTE: Please notify your sales representative if any of the above items are missing or damaged.

# MC-5150-DC-CP Panel Layout

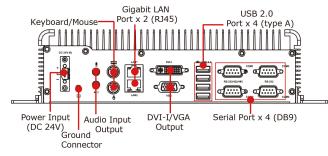
The following figures show the panel layouts of the MC-5150-DC-CP.

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



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## MC-5150-DC-CP Rear View



#### **LED Indicators**

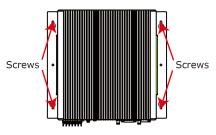
The following table describes the LED indicators located on the front panel of the MC-5150-DC-CP.

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	SSD card is reading/writing	
	(blinking)		
	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.

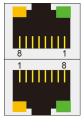
#### VGA and DVI-I Outputs

The MC-5150-DC-CP comes with a D-Sub 15-pin female connector on the front panel to connect a VGA CRT monitor, and has a DVI-I connector on the front panel to connect the panel to a DVI-I cable.

#### **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 RS-485					
Pin	RS-232	RS-422	RS-485	RS-485	
			(4-wire)	(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 computers have a removable storage device tray on the front panel, and an additional storage expansion slot that is accessible from the bottom panel. You may install either a hard disk drive or an 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.





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