

MC-1112/1122 Series Quick Installation Guide

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Overview

The Moxa MC-1112/1122 Series DIN-rail mountable, fanless, x86 embedded computers are based on the Intel® Atom™ E3800 Series processor. These computers feature a reliable I/O design that maximizes connectivity and supports multiple wireless modules (Wi-Fi/3G/LTE), making these computers suitable for a diverse range of communication applications.

Powered by a wide operating temperature range (-40 to 70°C) and Safety/EMI/EMS compliances, the MC-1112/1122 Series is ideal for intelligent computing and communication solutions in critical environments, including marine communication, Oil & Gas field site monitoring, and transportation.

The MC-1112/1122 Series comes with hardware monitoring features built in for device I/O status monitoring and alerts, system temperature monitoring and alerts, and system power management. Monitoring system status closely makes it easier to recover from errors and provides the most reliable platform for your applications.

Package Checklist

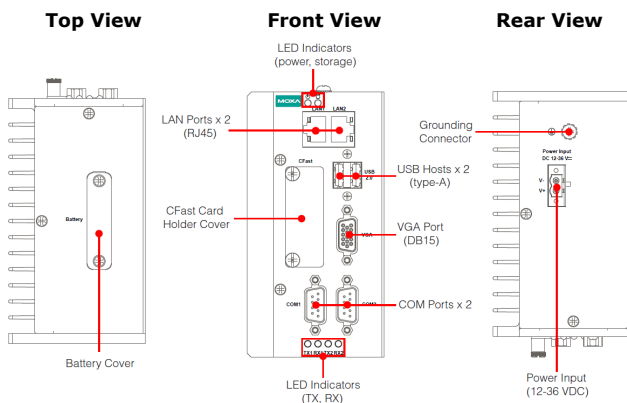
Before installing the MC-1112/1122, verify that the package contains the following items:

- MC-1112/1122 embedded computer
- Terminal block to power jack converter
- DIN-rail mounting kit
- Quick installation guide (printed)
- Documentation and software CD or DVD
- Warranty card

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

MC-1112 Panel Layout

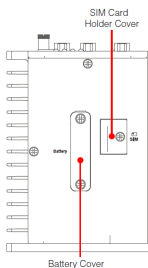
The following figures show the panel layouts of the MC-1112 Series:



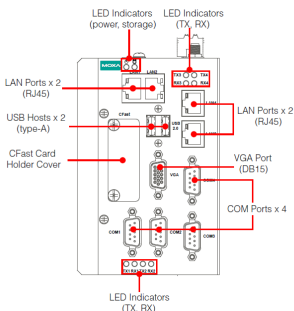
MC-1122 Panel Layout

The following figures show the panel layouts of the MC-1122 Series:

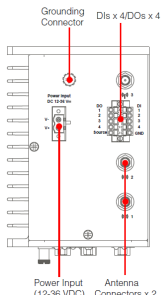
Top View



Front View





Rear View



LED Indicators

The following table describes the LED indicators (TX, RX) located on the front panel of the MC-1112/1122:

LED Name	Status	Function
Power 	Green	Power is on and the computer is functioning normally
	Off	Power is off
Storage 1 (CFast) 	Yellow	Blinking: Data is being transmitted
	Off	No data transmission
LAN 1/2/3/4 (LAN 3/4 only on MC-1122)	Green	Steady on: 100 Mbps Ethernet link Blinking: Data is being transmitted
	Yellow	Steady on: 1000 Mbps Ethernet link Blinking: Data is being transmitted
	Off	10 Mbps Ethernet link or LAN is not connected
Tx 1/2/3/4	Green	Blinking: Data is being transmitted
	Off	No connection
Rx 1/2/3/4	Yellow	Blinking: Data is being received
	Off	No connection

Installing the MC-1112/1122

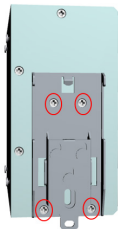
DIN-Rail Mounting

The MC-1112/1122 comes with a DIN-rail mounting kit. To install the DIN-rail mounting kit, do the following:

Installation:

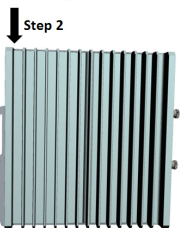
STEP 1:

Use the 4 screws included in the kit to attach the DIN-rail mounting bracket to the MC-1112/1122's rear panel and tighten the screws to secure the bracket to the MC-1112/1122.



STEP 2:

Insert the top of the DIN rail into the slot just below the upper hook of the DIN-rail mounting kit.



STEP 3:

Press the MC-1112/1122 towards the DIN-rail until it snaps into place.



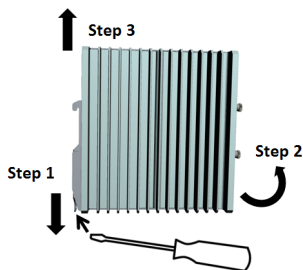
Removal:

STEP 1:

Pull down the latch on the mounting kit with a screwdriver.

STEP 2 & 3:

Slightly pull the MC-1112/1122 forward and lift up to remove it from the DIN rail.

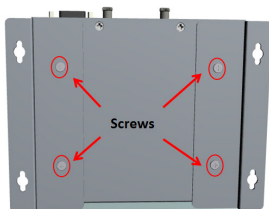


Wall or Cabinet Mounting (DNV)

The MC-1112/1122 can be installed on a wall by using the optional wall-mounting kit. This wall-mounting kit must be purchased separately.

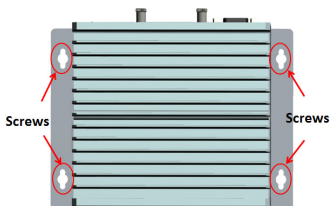
STEP 1:

Use two screws for each bracket and attach the brackets to the rear of the MC-1112/1122.



STEP 2:

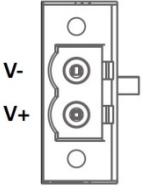
Use two screws per side to attach the MC-1112/1122 to a wall or cabinet.



Connector Description

Power Connector

Power Input
DC 12-36 V

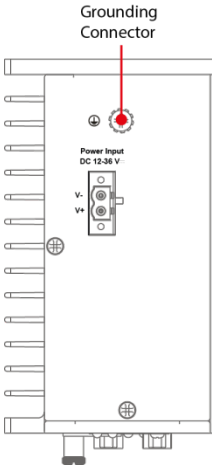


Use a LPS (12-36 VDC) or Class 2 power cord to connect to the MC-1112/1122's "terminal block to power jack converter" and then turn on the power. If the power is supplied properly, the power LED will light up. The OS is ready when the power LED glows a solid green.

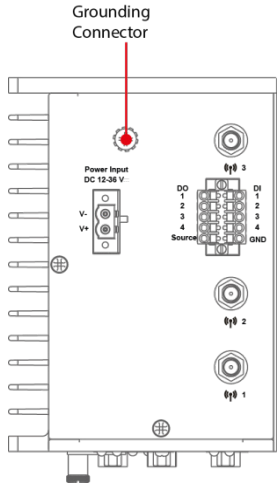
Grounding the MC-1112/1122

Grounding and wire routing help limit the effects of noise due to electromagnetic interference (EMI). Run the ground connection from the grounding screw (M4) to the grounding surface prior to connecting the power as shown in the illustrations below:

MC-1112



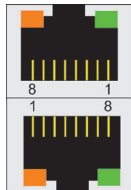
MC-1122



Ethernet Ports

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

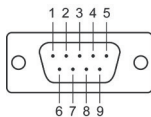
Pin	10/100 Mbps	1000 Mbps
1	ETx+	TRD(0)+
2	ETx-	TRD(0)-
3	ERx+	TRD(1)+
4	-	TRD(2)+
5	-	TRD(2)-
6	ERx-	TRD(1)-
7	-	TRD(3)+
8	-	TRD(3)-



Serial Ports

The serial ports use DB9 connectors. Each port can be configured by software as a RS-232, RS-422, or RS-485 port. The pin assignments for the ports are shown in the following table:

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	-	-	-



USIM Slot

The MC-1112/1122 has a USIM slot for 3G/LTE wireless Internet connections. To install a USIM card, gently remove the outer cover from the bottom, and then insert the USIM card into the slot.

USB Hosts

The MC-1112/1122 has two USB 2.0 Type A connectors. The two USB 2.0 ports are located on the front panel. The ports support keyboard and mouse, and can also be used to connect a flash disk for storing large amounts of data.

DI/DO

The MC-1112/1122 is provided with a 2 x 5 terminal block that has 4 digital inputs and 4 digital outputs.

