DFI®

EC900-FS6 Installation Guide

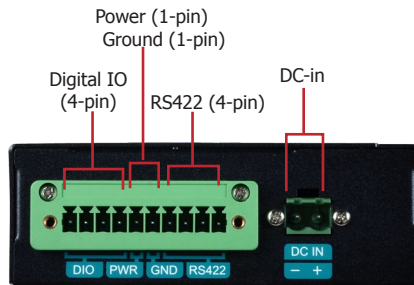## Package Contents

| |
|---|
| • EC900-FS6 system unit |
| • 10-pole terminal block for RS-422/4-bit DIO |
| • 2-pole terminal block for RS-485 |
| • 2-pole terminal block for power input |
| • DIN-rail bracket/screw pack |

Panel

Front View
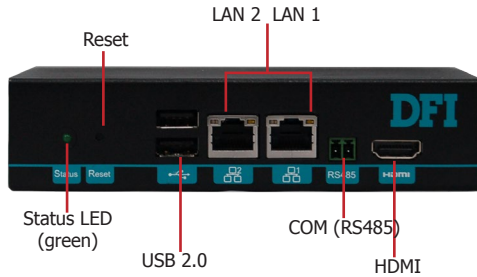
LAN 2 LAN 1

Reset

Status LED (green)

USB 2.0

COM (RS485)

HDMI

Rear View

Power (1-pin)
Ground (1-pin)

Digital IO (4-pin)

RS422 (4-pin)

DC-in

DIO PWR GND RS422

DC IN − +

Removing the Chassis Cover

Please observe the following guidelines and follow the procedure to open the system.

1. Make sure the system and all other peripheral devices connected to it have been powered off.

2. Disconnect all power cords and cables.

3. The 3 mounting screws on the rear and bottom sides of the system are used to secure the cover to the chassis. Remove these screws and put them in a safe place for later use.


Chassis screw

Opening to SW5
(see page 6 below)
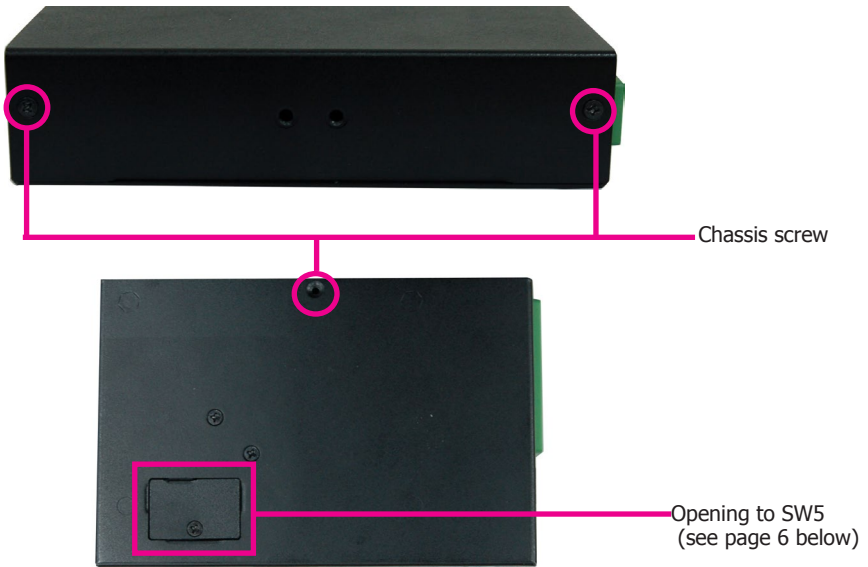
4. Lift the cover to open the system. The Mini PCIe socket is readily accessible after removing the bottom cover.

Micro SD slot
(on the back side)

Mini PCIe socket
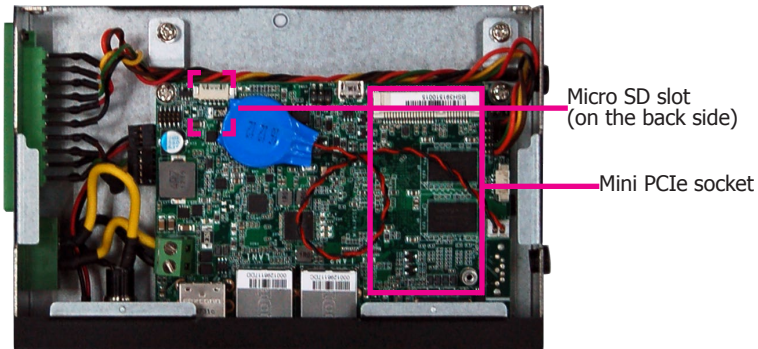
Installing a Mini PCIe Card

The system board is equipped with 1 Mini PCIe slot that supports both PCIe and USB signals.

1. Grasp the Mini PCIe card by its edges and align the notch of the PCIe card with the key in the connector on the system board.
2. Push down on the other end of the Mini PCIe card and use the provided mounting screw to secure the card on the system board.
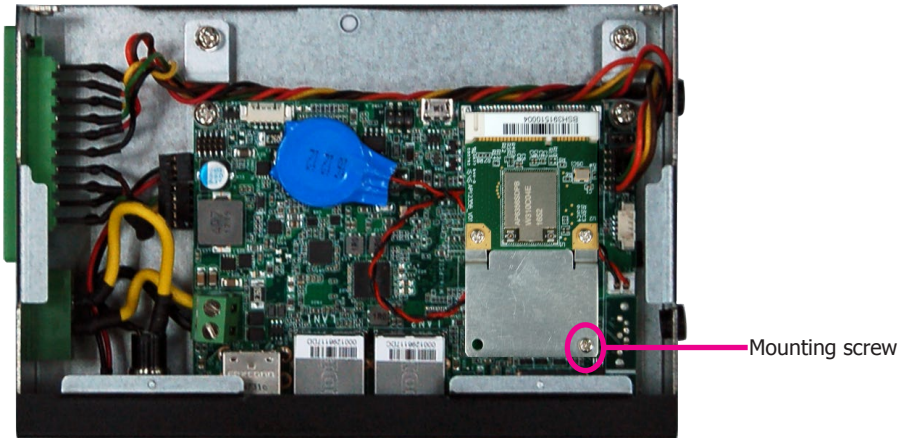
Mounting screw

3. Push down on the other end of the Mini PCIe card and use the provided mounting screw to secure the card on the system board.
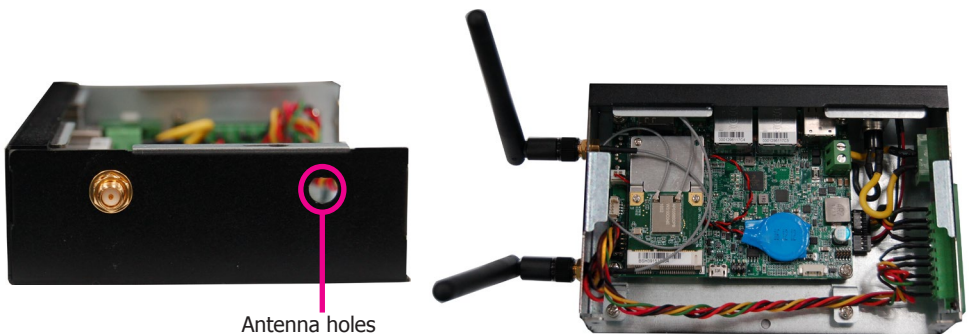
Antenna holes

Note:

If installing a wireless module, place the antenna cable(s) on top of the Mini PCIe and route the cables to the side of the chassis to reach the antenna holes.
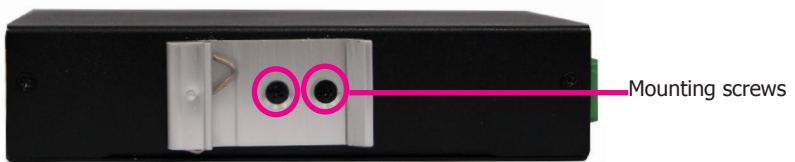
⊙ DIN-Rail Mount

The system features DIN-rail mount chassis that facilitates fast installation of the EC900-FS6 to a DIN rail.

The din-rail mount kit includes the following:

• Din-rail mount bracket
• 2 screws

1. Use the provided mounting screws to attach the din-rail mount bracket to the rear side of the device.
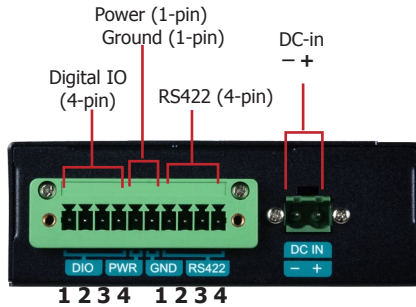

Mounting screws

2. Install the device onto the rail.

Communication Port Pin Assignments

The system is equipped with one 10-pole terminal block that enables digital input/output with power and RS422 communication on the side panel.

Digital Input/output	Pin Assignments
Pin 1 (starting at the left)	DIO7
Pin 2	DIO6
Pin 3	DIO5
Pin 4	DIO4

Power	Pin Assignments
Power	3.3V
Ground	GND

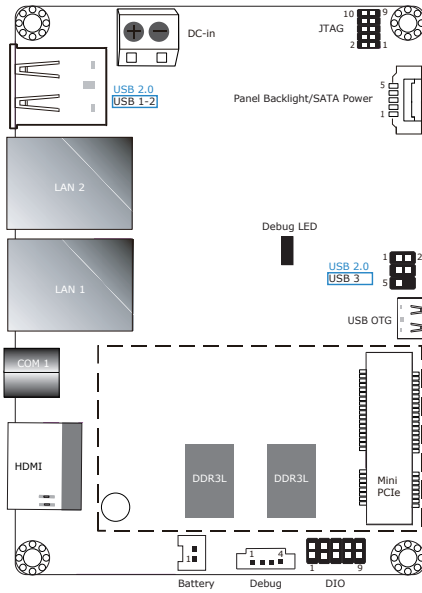| RS422	Pin Assignments
Pin 1 (starting at the left)	TX-
Pin 2	TX+
Pin 3	RX+
Pin 4	RX-

The system is also equipped with one 2-pole terminal block that enables RS485 communication on the front panel.
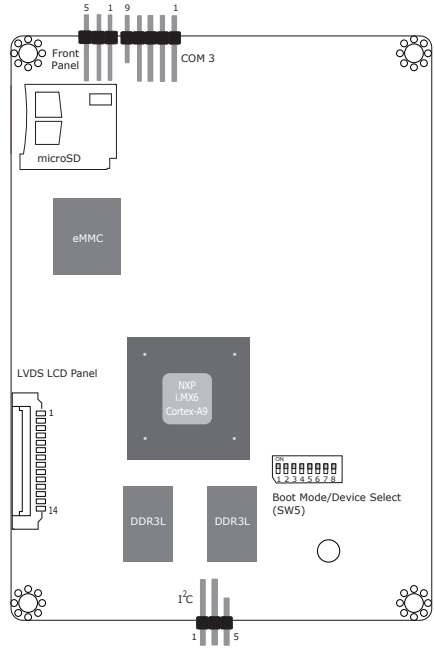

RS485	Pin Assignments
Pin 1 (starting at the left)	RS485-
Pin 2	RS485+

Board Layout and Jumper Settings

Top

Bottom

Boot Mode Select	SW5
Boot from the fuses	7 Off, 8 Off
Serial downloader	7 On, 8 Off
Boot from the board settings (default)	7 Off, 8 On
Reserved	7 On, 8 On

Boot Device Select	SW5							
	1	2	3	4	5	6	7	8
eMMC (default)	On	On	Off	Off	On	On	Off	On
SPI	xx	xx	xx	On	On	Off	Off	On
SD	On	Off	On	Off	Off	On	Off	On

Note:

SW5 can be conveniently accessed from the opening on the bottom chassis. This switch is for development and troubleshooting which should only be performed by developers and service technicians who are fully aware of the outcome of any changes to the settings.