

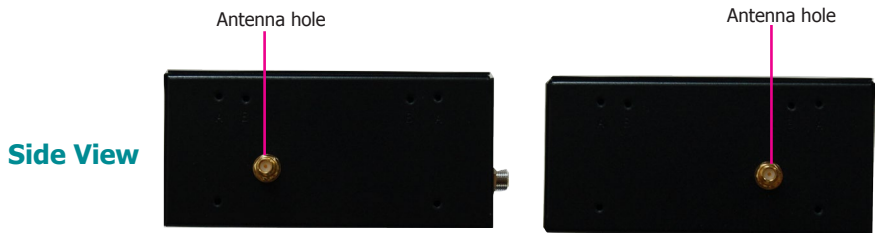
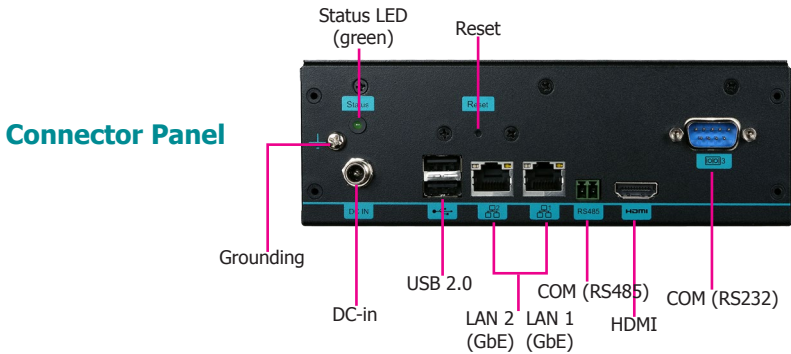
DFI®

KS057R-FS Installation Guide

Package Contents

- One KS057R-FS System Unit
- Wall Mount Bracket/Screw Pack
- DIN-rail Bracket/Screw Pack

Panel



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 4 mounting screws attached touchscreen cover and the 6 screws on the sides of the system are used to secure the touch panel to the chassis. Remove these screws and put them in a safe place for later use. Be careful when opening the touch panel to avoid pulling the connecting cables apart.



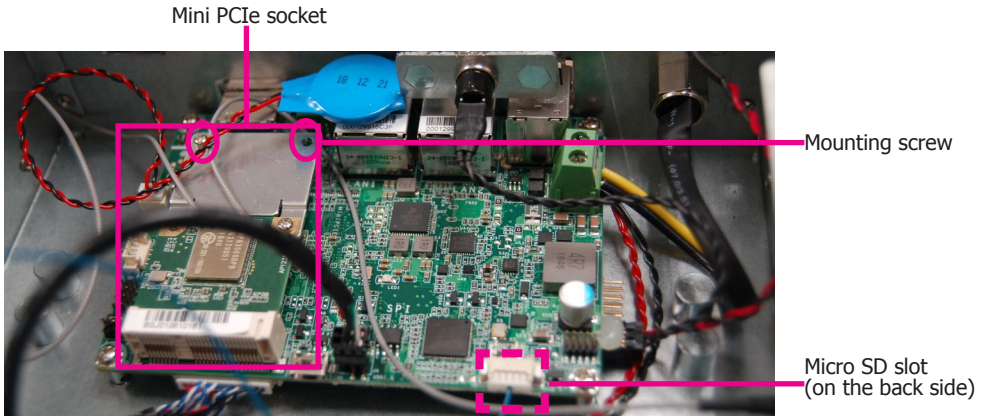
4. Lift the cover to open the system. The Mini PCIe socket is readily accessible after removing the top cover.



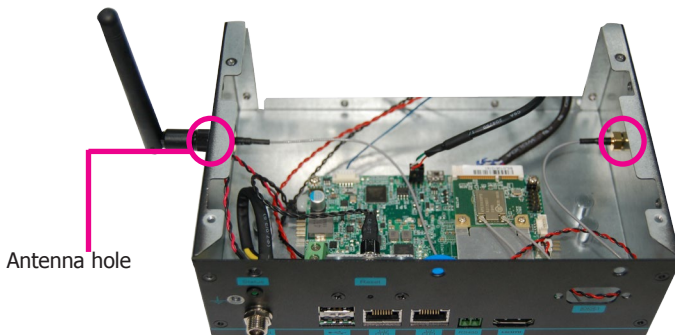
Installing a Mini PCIe Card

The system board is equipped with 1 full-size 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 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.



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.

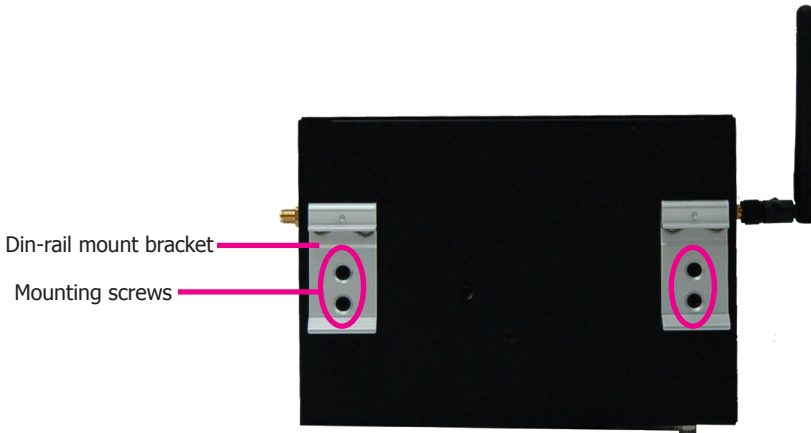
DIN-rail Mount

The system features DIN-rail mount chassis that facilitates fast installation of the KS057R-FS to a DIN rail.

The DIN-rail mount kit includes the following:

- DIN-rail mount brackets
- 4 screws

1. Use the provided mounting screws to attach the DIN-rail mount brackets to the rear side of the device. Note that the connector panel should be at the bottom.



2. Install the device onto the rail.



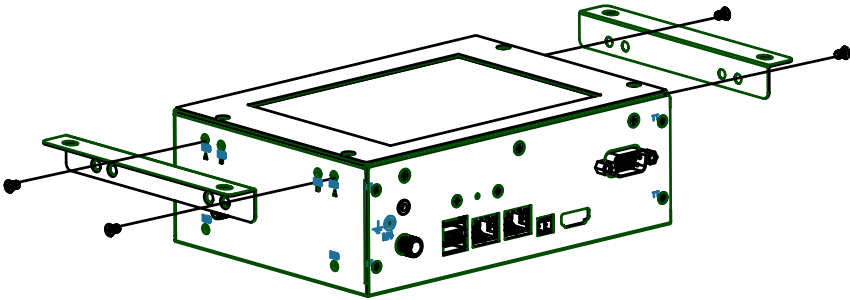
Wall Mount

The system also features wall mount chassis that enables you to mount the device on the wall.

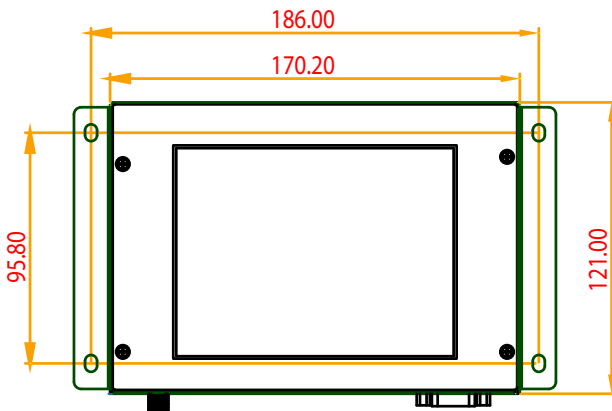
The wall mount kit includes the following:

- Wall mount brackets
- 4 screws

1. Use the provided mounting screws to attach wall mount brackets to both sides of the device.

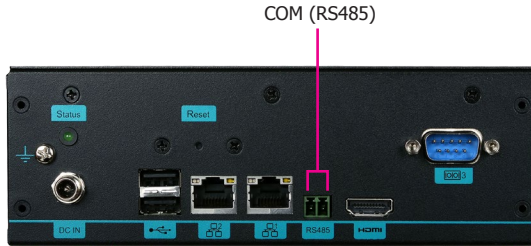


2. Fix the device on the wall. The following picture shows the dimension and location of wall mount screw holes.



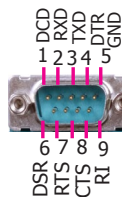
Communication Port Pin Assignments

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



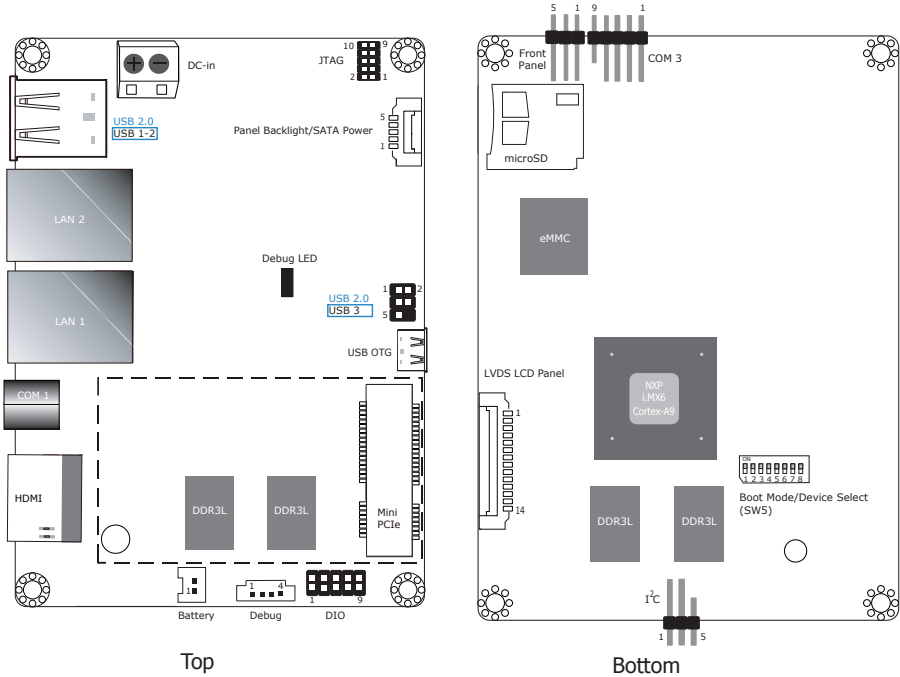
RS485	Pin Assignments
Pin 1 (starting at the left)	RS485-
Pin 2	RS485+

The system is also equipped with one DB9 serial port that enables RS232 communication on the connector panel.





Board Layout and Jumper Settings



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

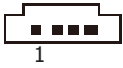
Note:

SW5 switch is located on the back side of the system board. It 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.



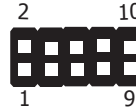
Board Layout and Internal Connectors

Debug Connector



Pin	Pin Name
1	3.3V
2	UART5_RX
3	UART5_TX
4	GND

DIO Connector



Pin	Pin Name
1	GPIO7
2	GPIO6
3	GPIO5
4	GPIO4
5	GPIO3
6	GPIO2
7	GPIO1
8	GPIO0
9	3.3V
10	GND

JTAG



Pin	Pin Name	Pin	Pin Name
1	3.3V	2	JTAG _TMS
3	GND	4	JTAG_TCK
5	GND	6	JTAG_TDO
7	JTAG_MOD	8	JTAG_TDI
9	JTAG_nTRST	10	JTAG_nRESET

USB 2.0 Connector (USB 3)



Pin	Pin Name
1	5V
2	Data-
3	Data+
4	GND
5	NC

USB 2.0 Connector (USB 3)



The USB OTG connector allows the system to read and write to the onboard eMMC memory from your host computer by using a micro-B type USB cable. Your system is pre-loaded with Yocto 1.8 beta or Android 5.1 beta on the eMMC.