# **DFI**<sup>°</sup> KS156-AL Installation Guide



#### **Features**

- 15.6" 1366x768 TFT LCD Panel with Touch Screen
- 1x 2.5" SATA drive bay
- IP65 Front Panel Protection
- VESA/Panel Mount
- Rich I/O: 2 LAN, 2 COM, and 4 USB 3.0

DFI reserves the right to change the specifications at any time prior to the product's release. For the latest revision and more details of the installation procedure, please refer to the user's manual on the website.

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## Removing the Chassis Cover

- 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 6 mounting screws on the rear chassis are used to secure the cover to the system. Remove these screws and put them in a safe place for later use.



- 4. Lift the cover up to open the system.
- 5. The SODIMM, Mini PCIe and the M.2 sockets are readily accessible after removing the chassis cover.



### Installing a SATA drive

The system can accommondate one 2.5-inch SATA drive. Please use the following procedure to install a SATA drive.

1. Uninstall the SATA mount bracket from the system. Align the mounting holes of the SATA drive with the mounting holes on the SATA mount bracket and use the provided mounting screws to attach the SATA drive to the bracket.



- 2. Connect one end of the SATA cable to the SATA power and data connectors on the SATA drive and the other end of the SATA cable to the SATA power and data connectors on the system board.
- 3. Align the mounting holes of the SATA mount bracket with the mounting holes on the system and use the provided mounting screws to secure the SATA mount bracket in place.



#### Note:

The SATA Port 1 shares the bandwidth with the M.2 slot. To assign the SATA bandwidth to the SATA Port 1 or the M.2 slot, refer to "Board Layout and Jumper Settings."

### Installing an M.2 Card

The system is equipped with one M.2 socket, supporting both the M.2 22x42mm and 22x80mm (key B) form factors. Use the following procedure to install an M.2 card:

1. To install an M.2 type 2242 card, please install the standoff at the 42mm mounting position first.



M.2 Type 2242 Socket

M.2 mount standoff



- 2. Align the notch at the edge of the M.2 card with the key in the connector.
- 3. Insert the M.2 card into the connector.



3. Push down on the other end of the M.2 card and secure the card on the mainboard with the provided mounting screw.



#### Note:

The M.2 socket supports PCIe, USB, and SATA signals and can accommodate common mobile broadband and storage modules. For jumper settings on switching the signal between SATA and PCIe, refer to "Board Layout and Jumper Settings."

#### Installing a Mini PCIe Card

The system board is equipped with one Mini PCIe slot that supports PCIe and USB signals. Use the following procedure to install a Mini PCIe card:

1. Grasp the Mini PCIe card by its edges and align the notch in the connector of the PCIe card with the key in the connector on the system board.



2. Push the Mini PCIe card down and use the provided mounting screws to secure the card on the system board. Route the antenna cable underneagth the SATA bracket.





#### VESA mount

The VESA mount kit includes the following:

- 2 VESA mount brackets
- Bracket screws



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VESA mount bracket 1





VESA mount bracket 2

Please use the following procedure to mount your system:

- 1. Select a place on the wall where you will mount the Panel PC.
- 2. Use the provided mounting screws to attach "VESA mount bracket 1" to the wall.



3. Attach the other bracket (VESA mount bracket 2) to the rear of the Panel PC.



4. Slide the Panel PC to "VESA mount bracket 1" to attach the two brackets with the hooks. Then tighten the screw to secure the assembly in place.







The panel mounting kit includes the following:

10 mounting clamps



Please use the following procedure to mount your system:

- 1. Select a place on the panel (or wall) where you will mount the Panel PC.
- 2. Cut out a shape on the panel that corresponds to the Panel PC's rear dimensions (396.2mm x 246.5mm) and ensure that the Panel PC can be fitted into the panel properly.



- 3. Insert the Panel PC from the outside surface of the panel into the mounting hole until it is properly fitted against the panel.
- 4. Position the mounting clamps along the rear edges of the Panel PC and insert them into the slits around the Panel PC.



5. The first and second clamps must be positioned and secured diagonally prior to mounting the rest of the clamps. Tighten the clamp's screw using an electric screwdriver by pressing the flat top side of the screw onto the back of the panel. The illustration below shows that all clamps are properly mounted.



## Board Layout and Jumper Settings



PCIE1/M.2 (Key B) PCIE Signal Select	JP3
PCIE1 (default)	1-2, 4-5, 7-8, 10-11 On
M.2 PCIe	2-3, 5-6, 8-9, 11-12 On

LVDS Panel Power Select	JP8	COM Port PS232/Power Select	COM1 (JP2)
+12V	1-2 On		COM2 (JP5)
+5V	3-4 On	RS232 (default)	1-3 (RI-), 2-4 (DCD-) On
+3.3V (default)	5-6 On	RS232 with power	3-5 (+5V), 4-6 (+12V) On

LVDS Backlight Power Select	JP9
+3.3V (default)	1-2 On
+5V	2-3 On

Clear CMOS Data	JP6
Normal (default)	1-2 On
Clear CMOS Data	2-3 On

LCD/Inverter Power Select	JP10
+12V (default)	1-2 On
+5V	2-3 On

SATA 1/M.2 (Key B) SATA Signal Select	JP4
SATA 1 (default)	1-2, 4-5, 7-8, 10-11 On
M.2 SATA	2-3, 5-6, 8-9, 11-12 On

M.2 Signal Select	JP1
SATA (default)	1-2 On
PCIe	2-3 On