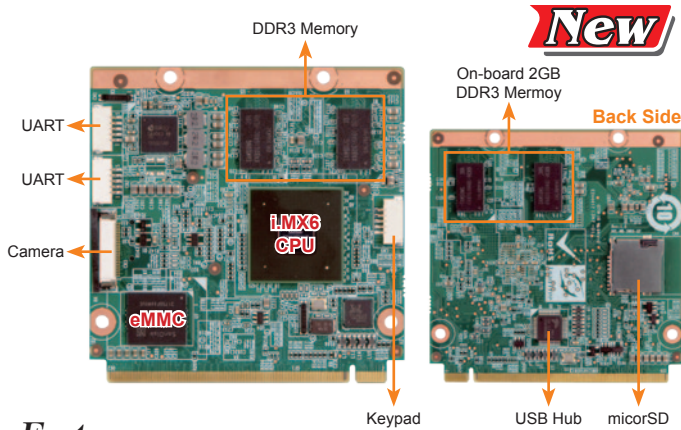


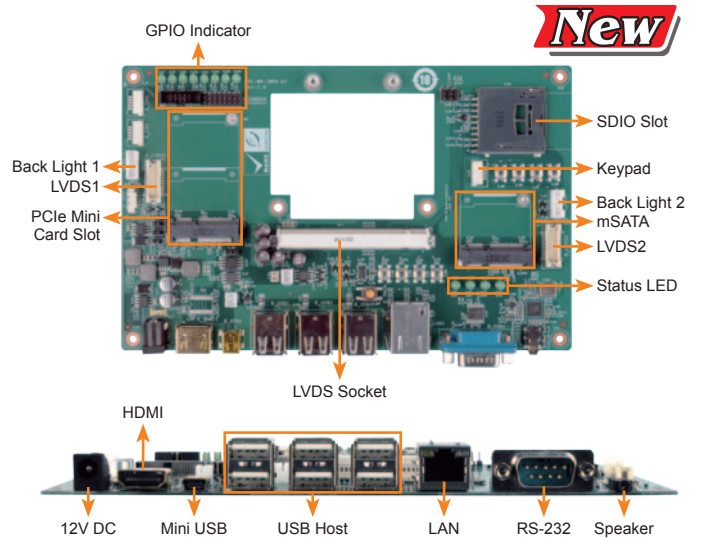
iQ7-IMX6

Q7 CPU module with Freescale™ i.MX6 quad-core processor



iQ7-DB-MITX

Baseboard for Q7 modules



Features

1. Freescale™ i.MX6 Cortex™-A9 quad-core 1.2GHz
2. MPEG-4 Video Encoding/Decoding 1080P HDMI graphics
3. Support CAN2.0b and UART
4. Build-in Ubuntu 10.04
5. On-board DDR3 memory 2GB supported

Specifications

- ◆ CPU
Freescale™ i.MX6 ARM® Cortex™-A9 quad-core, 1.2GHz
- ◆ Memory
2GB DDR3
- ◆ Storage
Flash: 8GB eMMC, up to 32GB eMMC
SATA: 1 x SATA 3Gb/s for quad-core and dual-core CPUs only
- ◆ Graphics Controller
Video, 2D and 3D graphics units integrated in i.MX6 processor
OpenGL ES 1.1/2.0/Halti, OpenVG 1.1, OpenCL1.1 EP Multi-Format Hardware Video Encoder/Decoder
- ◆ I/O Interface
6 x USB 2.0 host
1 x Mini USB OTG
- ◆ PCIe Mini
1 x PCIe Mini
- ◆ CAN-bus: 1 x CAN-bus
- ◆ I2C Bus: 3 x I2C bus (up to 400Kbit/s)
- ◆ SPI: 1 x Slave select
- ◆ GPIO: 8 x GPIO
- ◆ Audio: AC'97 and I2C audio interface
- ◆ Serial
2 x UART on MXM
2 x UART on board
- ◆ Ethernet: 1 x 10/100/1000Mbps GbE
- ◆ Watchdog Timer
Initiates system reset
- ◆ UUID: 64 bits
- ◆ Display Interface
LCD interface: Dual-channel LVDS interface, 24-bit (up to 1920x1200)
HDMI interface: HDMI V1.4 up to WUXGA (1920x1200) incl. Full-HD@30fps
Camera interface: BT.656 camera interface
- ◆ Linux: Ubuntu 10.04
- ◆ Power Supply Voltage: +5V; 5V standby
- ◆ Operating Temperature: 0°C ~ 70°C
- ◆ Storage Temperature: -10°C ~ 80°C
- ◆ Operating Humidity: 5% ~ 95%, non-condensing
- ◆ Dimensions: 70 mm x 70 mm x 13 mm (LxWxH)

Packing List

1 x iQ7-IMX6-R10 Q7 CPU module

Ordering Information

Part No.	Description
iQ7-IMX6-R10	Q7 CPU module with Freescale™ i.MX6 ARM® Cortex™-A9 quad-core, 1.2GHz, LVDS, HDMI, USB, microSD, GbE, on-board 2GB memory
iQ7-DB-IMX6-R10	Carrier board for iQ7-IMX6-R10 module

Features

1. Carrier board for iQ7-IMX6-R10 module
2. Dual-channel 24-bit LVDS supported
3. Supports audio, SD slot, mSATA, PCIe Mini
4. Supports six USB 2.0 host and one USB 2.0 OTG
5. Supports one HDMI port
6. Supports one Gigabit LAN port

Specifications

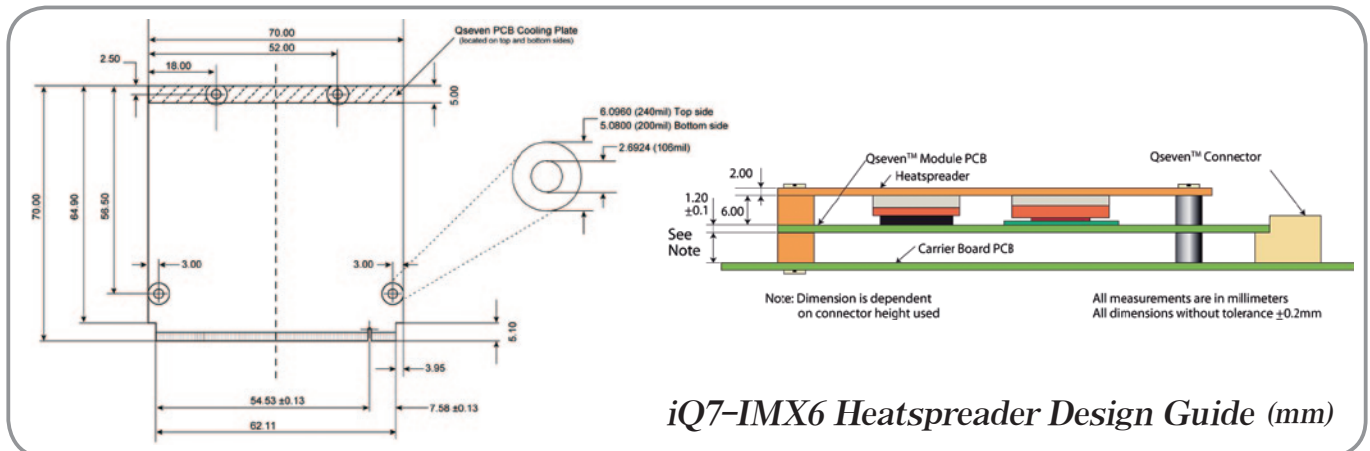
- ◆ Audio I/F
1 x I2S
- ◆ I/O Interface
6 x USB 2.0 host
1 x USB 2.0 OTG
1 x Half-size PCIe Mini card slot with mSATA support (SATA 3Gb/s)
1 x Full-size PCIe Mini card slot
8 x GPIO
1 x 8-bit SDIO 2.0
- ◆ Serial Communication
1 x SPI
1 x CAN 2.0B
2 x UART
3 x I2C
- ◆ Ethernet
1 x Gigabit LAN
- ◆ Display Port
Dual-channel 24-bit LVDS
One HDMI 1.4
- ◆ Other On-board Devices and Interfaces
1 x SDIO
1 x 8GB eMMC
1 x microSD slot
4 x Keypad
- ◆ Power Input
+5V DC in, +5V SBY
- ◆ Operating Temperature
-20°C ~ 60°C
- ◆ Dimensions
123 mm x 191mm

Packing List

1 x Carrier board for iQ7-IMX6-R10 module

Ordering Information

Part No.	Description
iQ7-DB-IMX6-R10	Carrier board for iQ7-IMX6-R10 module



iQ7-IMX6 Heatspreader Design Guide (mm)

1 Industrial Computing Solutions

2 Video Capture Solutions

3 Embedded Computing Solutions

4 Automation Control

5 ORing Network Communication

6 Power Supply/Peripherals

7 Panel Solutions Introduction