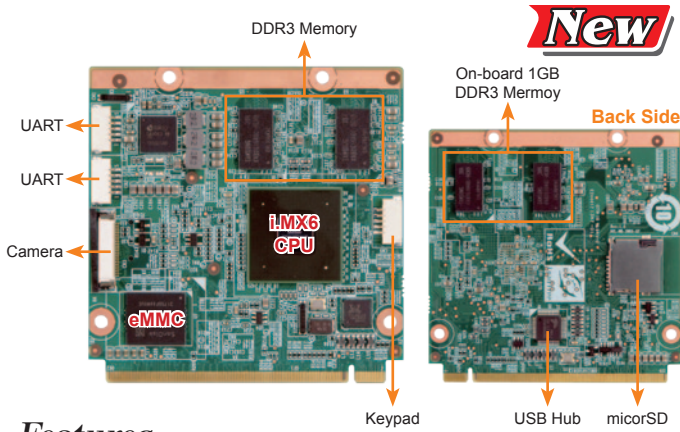


# iQ7-IMX6

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



## Features

1. Freescale™ i.MX6 Cortex™-A9 quad-core 1.0GHz
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 1GB supported

## Specifications

- ◆ CPU  
Freescale™ i.MX6 ARM® Cortex™-A9 quad-core, 1.0GHz
- ◆ Memory  
1GB 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

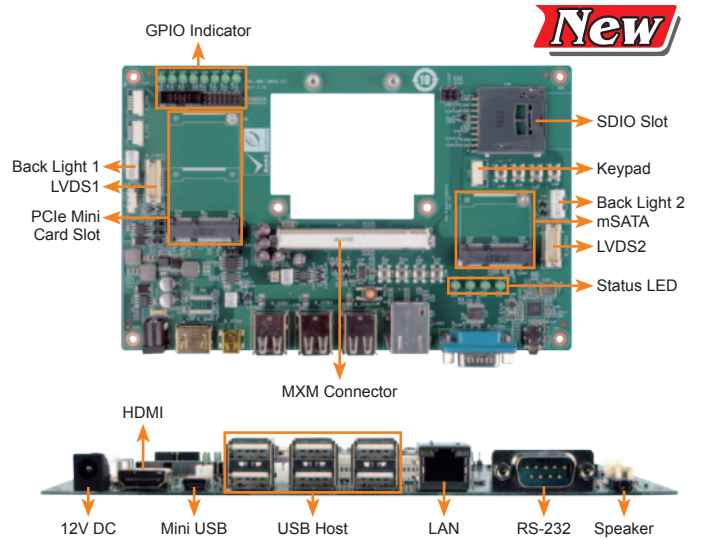
1 x iQ7-IMX6-R10 Q7 CPU module

## Ordering Information

Part No.	Description
iQ7-IMX6-R10	Q7 CPU module with Freescale™ i.MX6 ARM® Cortex™-A9 quad-core, 1.0GHz, LVDS, HDMI, USB, microSD, GbE, on-board 1GB memory
iQ7-DB-IMX6-R10	Carrier board for iQ7-IMX6-R10 module

# iQ7-DB-IMX6

Baseboard for Q7 modules



## 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

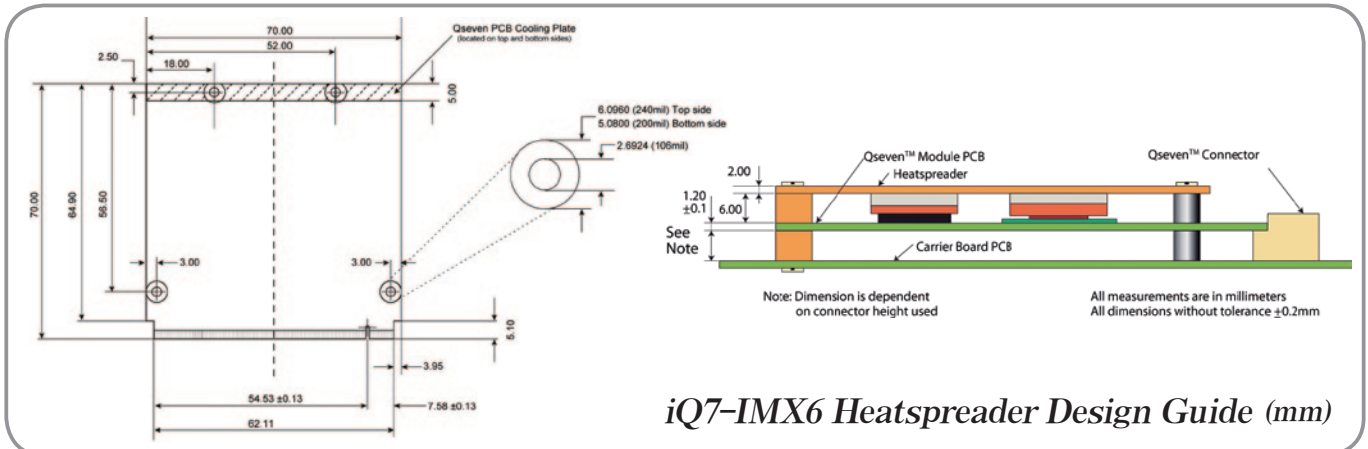
- ◆ Audio I/F  
1 x I2S
- ◆ I/O Interface  
6 x USB 2.0 host  
1 x USB 2.0 OTG  
1 x Half-size PCIe Mini card slot with mSATA support (SATA 3Gb/s)  
1 x Full-size PCIe Mini card slot  
8 x GPIO  
1 x 8-bit SDIO 2.0
- ◆ Serial Communication  
1 x SPI  
1 x CAN 2.0B  
2 x UART  
3 x I2C
- ◆ Ethernet  
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)