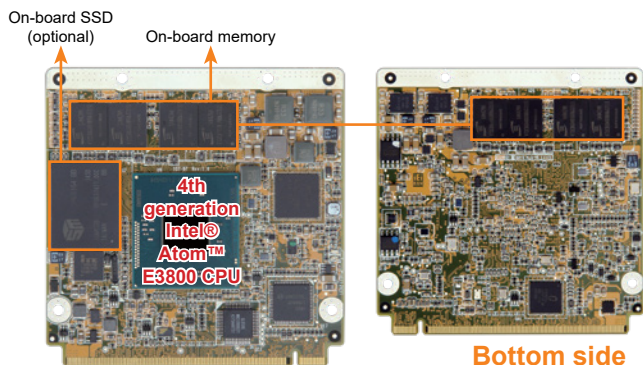


# iQ7-BT

Qseven Rev. 2.0 Module Supports 4th generation Intel® Atom™ Processor, LVDS, DDI, GbE, SATA 3Gb/s, USB 3.2 Gen 1 (5Gb/s), SDIO, Audio, -20°C~60°C and RoHS



## Features

- Support 22nm Intel® Atom™ on-board SoC
- Qseven connector pinout according to Qseven Specification Revision 2.0
- Supports 2 GB 1333/1066 MHz DDR3L memory (4 GB optional)
- Support optional soldered down SSD up to 64 GB

## Specifications

- ◆ CPU
  - Intel® Atom™ E3845 on-board SoC (1.91GHz, quad-core, 2MB cache, TDP=10W)
  - Intel® Atom™ E3825 on-board SoC (1.33GHz, dual-core, 1MB cache, TDP=6W)
- ◆ Memory
  - 2 GB soldered-down 1333/1066 MHz DDR3L memory (up to 4 GB)
- ◆ BIOS
  - UEFI BIOS
- ◆ Graphics Engine
  - Intel® HD Graphics Gen 7 Engine with 4 execution units support DX11.1, OpenGL 4.2 and OpenCL1.2
- ◆ Display Output
  - Dual independent display
    - 1 x LVDS: 18/24-bit dual-channel LVDS (up to 1920x1200@60Hz)
    - 1 x DDI: (DP up to 2560x1600@60Hz / HDMI up to 1920x1080@60Hz)
- ◆ Ethernet
  - Intel® I210 GbE controller
- ◆ Embedded Controller
  - ITE IT8528E/FX
- ◆ I/O Interface
  - 6 x USB 2.0 signal to baseboard
  - 1 x USB 3.2 Gen 1 (5Gb/s) signal to baseboard
- ◆ Storage
  - 2 x SATA 3Gb/s signal to baseboard
  - Optional soldered-down up to 64 GB SSD (SATA port 2)
- ◆ Audio
  - High-definition Audio interface to baseboard
- ◆ SMBus
  - Yes, to baseboard
- ◆ I²C
  - Yes, to baseboard
- ◆ LPC
  - Yes, to baseboard
- ◆ SDIO
  - One 8-bit SDIO 2.0, to baseboard
- ◆ SPI
  - Yes, to baseboard
- ◆ Serial Port
  - One serial port to baseboard (form EC)
- ◆ Expansion
  - 3 x PCIe x1 signal to baseboard
- ◆ Watchdog Timer
  - Software programmable supports 1~255 sec. system reset (form EC)
- ◆ Power Consumption
  - 3.3V@0.13A, 5V@0.13A, 12V@1.35A, 5VSB@0.12A (Intel® Atom™ E3845 CPU with 2 GB on-board memory)
- ◆ Operating Temperature
  - 20°C ~ 60°C
- ◆ Operating Humidity
  - 5% ~ 95%, non-condensing
- ◆ Dimensions
  - 70 mm x 70 mm
- ◆ Weight
  - GW: 300g / NW: 150g
- ◆ Safety
  - CE/FCC compliant

## Packing List

1 x iQ7-BT single board computer	
1 x Heatsink	1 x QIG

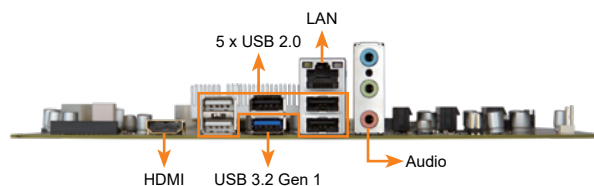
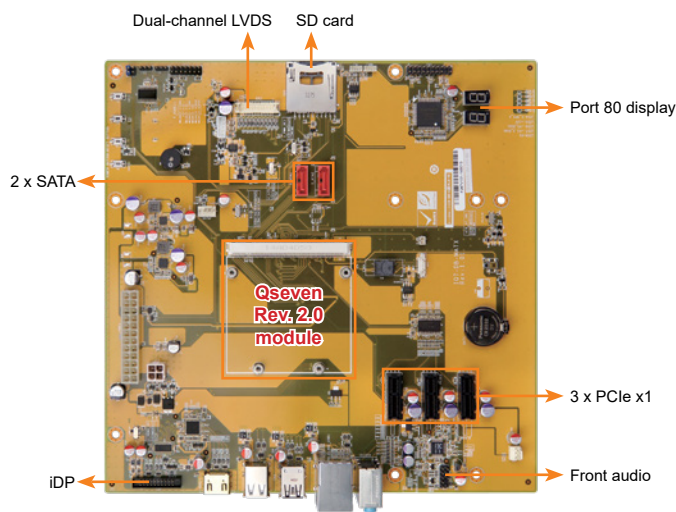
## Ordering Information

Part No.	Description
iQ7-BT-E38451-R10	Qseven Rev. 2.0 module supports Intel® Atom™ processor E3845 (quad core, 10W), on-board 2 GB DDR3L, LVDS, DDI, GbE, SATA 3Gb/s, SDIO, USB 3.2 Gen 1 (5Gb/s), Audio, and RoHS
iQ7-BT-E38251-R10	Qseven Rev. 2.0 module supports Intel® Atom™ processor E3825 (dual core, 6W), on-board 2 GB DDR3L, LVDS, DDI, GbE, SATA 3Gb/s, SDIO, USB 3.2 Gen 1 (5Gb/s), Audio, and RoHS
iQ7-DB-MATX-R10	Baseboard for Qseven Rev. 2.0 module

Note: Models with other CPUs not listed in the table are requested by MOQ - 100 pcs/lot.

# iQ7-DB-MATX

Baseboard for Qseven Rev. 2.0 Module



## Features

- mATX form factor baseboard for Qseven Rev. 2.0 module
- Supports three PCIe x1
- 18/24-bit dual-channel LVDS

## Specifications

- ◆ COM Express Type
  - mATX form factor baseboard for Qseven Rev. 2.0 module
- ◆ Display Interfaces
  - 1 x LVDS
  - 1 x HDMI
  - 1 x iDP
- ◆ Audio
  - Realtek ALC888S HD Audio codec (Line-in, Line-out, Mic)
- ◆ Internal I/O Interface
  - 1 x LPC
  - 1 x SD card socket
  - 2 x SATA 3Gb/s
  - 3 x PCIe x1
- ◆ External I/O Interface
  - 1 x Audio jack (Line-in, Line-out, Mic)
  - 1 x HDMI
  - 1 x USB 3.2 Gen 1 (5Gb/s)
  - 5 x USB 2.0
  - 1 x RJ-45
- ◆ Front Audio
  - 1 x Front audio connector (2x5 pin)
- ◆ TPM
  - 1 x TPM connector(2x10 pin)
- ◆ Port 80 Display
  - 2x7 segment display
- ◆ Front Panel
  - 1 x Front panel (2x7 pin, power LED, HDD LED, buzzer speaker, power button, reset button)
- ◆ I²C
  - 3 x I²C (1x4 pin)
- ◆ SMBus
  - 1 x SMBus (1x4 pin)
- ◆ Watchdog Timer
  - Software programmable, supports 1~255 sec. system reset
- ◆ Power Supply
  - ATX power supply, ATX/AT mode support
- ◆ Fan Connector
  - 1 x CPU smart fan (1x4 pin)
  - 1 x System fan (1x3 pin)
- ◆ Operating Temperature
  - 20°C ~ 60°C
- ◆ Humidity
  - 5% ~ 95%, non-condensing
- ◆ Dimensions
  - 243.8 mm x 243.8 mm
- ◆ Safety
  - CE/FCC compliant

## Packing List

1 x Qseven® baseboard
1 x QIG

## Ordering Information

Part No.	Description
iQ7-DB-MATX-R10	Baseboard for Qseven Rev. 2.0 module
32102-000100-200-RS	SATA power cable, MOLEX 5264-4P to SATA15P