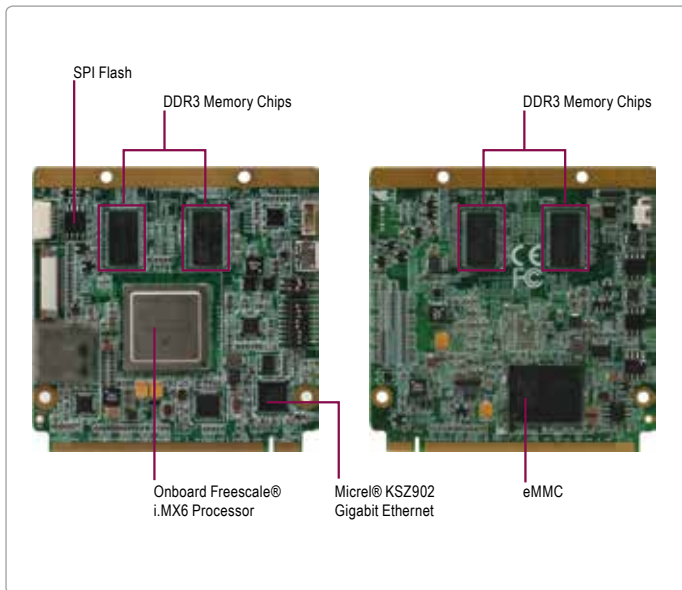


AQ7-IMX6

Qseven CPU Module with Onboard Freescale® i.MX6 Dual Lite/Quad ARM Cortex A9 Processor



Features

- Freescale® i.MX6 Dual Lite/Quad Processor (Commercial or Automotive Grade)
- Onboard DDR3 Memory 1GB, Up to 2GB (Optional)
- Gigabit Ethernet x 1 (KSZ9021RN)
- 24-bit Dual-channel LVDS LCD, HDMI
- I2S Audio Interface
- SATA x 1, eMMC (Optional)
- USB2.0 x 5 (One for USB OTG), PCI-Express [x1] x 1
- Qseven Module Size, 70mm x 70mm, Qseven Rev. 2.0



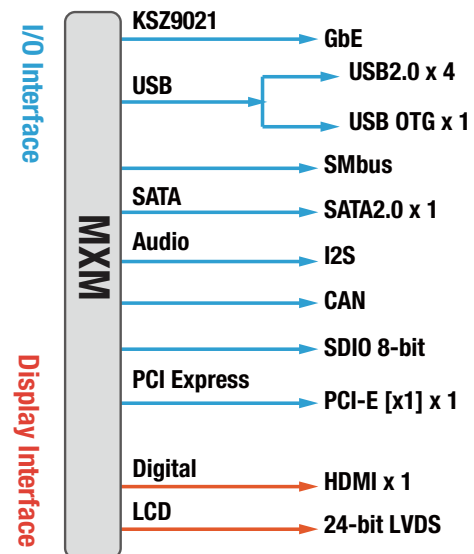
Specifications

System	
Form Factor	Qseven, Qseven Rev. 2.0
Processor	Freescale® i.MX6 Dual Lite 800MHz Processor (Commercial) Freescale® i.MX6 Quad 1.0GHz Processor (Automotive) Freescale® i.MX6 Quad 1.2GHz Processor (Commercial)
System Memory	Onboard DDR3 800MHz, 1GB, up to 2GB (Dual lite) Onboard DDR3 1066MHz, 1GB, up to 2GB (Quad)
Chipset	—
I/O Chipset	—
Ethernet	Micrel® KSZ9021RNI for 10/1000/1000Base-TX
BIOS	—
Wake On LAN	—
Watchdog Timer	Integrated Watch Dog and Timer
H/W Status Monitoring	—
Expansion Interface	PCI Express [x1] x1 CAN Bus x1 I2C x1 SDIO x1
Power Requirement	+5V DC
Power Consumption (Typical)	Typ. Application ~3 – 5 Watt @ 5V
Board Size	2.75" x 2.75" (70mm x 70mm)
Gross Weight	0.44 lb (0.2 Kg)
Operation Temperature	32 °F ~ 140 °F (0 °C ~ 60 °C) or -40°F ~ 185°F (-40°C ~ 85°C) Automotive
Storage Temperature	-40°F ~ 185°F (-40°C ~ 85°C)
Operation Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	—
Display	LVDS x 2 (24 bit x 1)/ LVDS x 1 (24 bit x 2), HDMI 1.4
LCD Interface	Up to 24-bit Dual-Channel LVDS
I/O	
Storage	SATA 3.0 Gb/s x 1, eMMC x 1 (optional)
Serial Port	Yes, for debug only
Parallel Port	—
USB	USB 2.0 x 5 (Shared with USB OTG client x 1)
I2C	1
Audio	I2S
GPIO	Supported
OS	Android 4.0 , Linux Kernel 3.0.35 (Ubuntu11.10 Oneiric)

Packing List

- M2.5 Screws x 4
- Product CD
- AQ7-IMX6

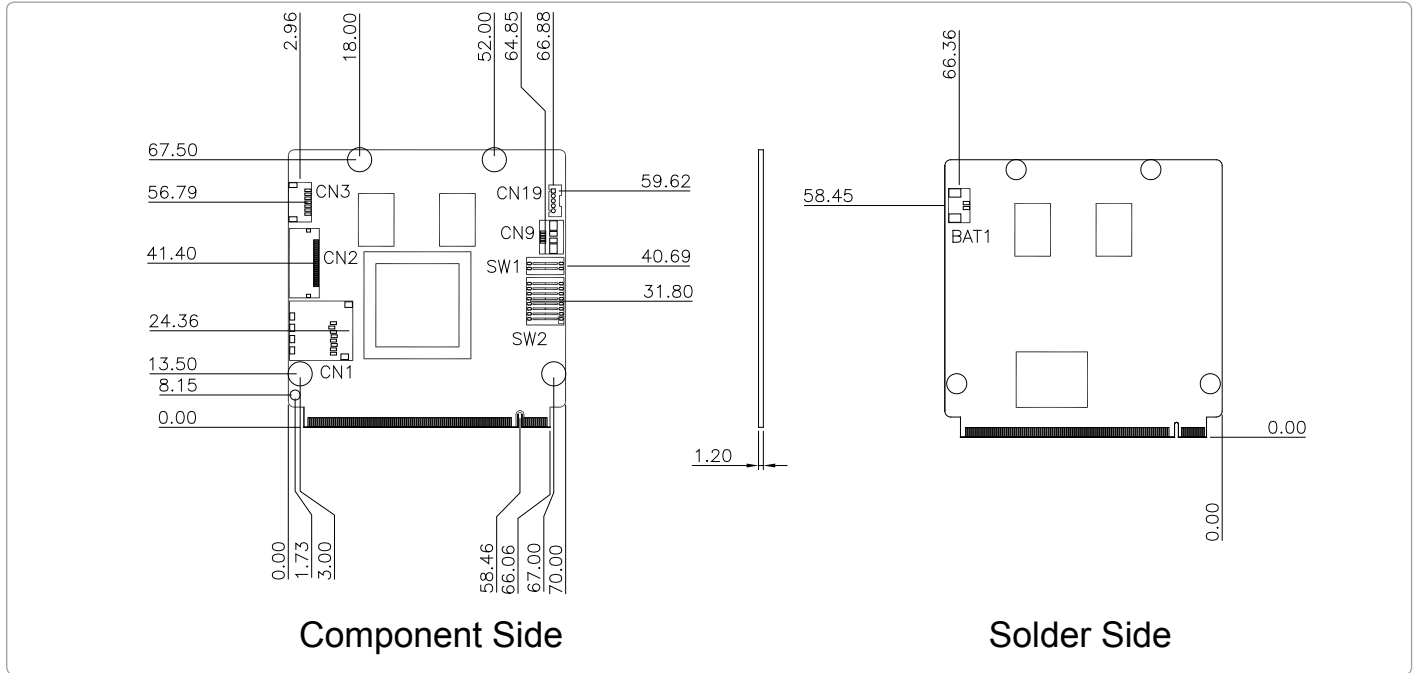
Block Diagram



AQ7-IMX6

Dimension

Unit: mm



Ordering Information

Part Number	CPU	Memory	Fan/Fanless	Display	LVDS	Storage	LAN	USB	Expansion Slot	Power	Temp
AQ7-IMX6-A10-01	Freescle i.MX6 Quad-Automotive grade- 1.0GHz	onboard DDR3 1GB	Fanless	HDMI, LVDS, eDP	24b, 1CH	SATA x 1	GbE x 1	USB2.0 x 5 (1 for USB OTG)	PCI-Express [x1] x 1	5V	0°C~60°C
AQ7-IMX6-A10-02	Freescle i.MX6 Quad-Commercial grade- 1.2GHz	onboard DDR3 1GB	Fanless	HDMI, LVDS, eDP	24b, 1CH	SATA x 1	GbE x 1	USB2.0 x 5 (1 for USB OTG)	PCI-Express [x1] x 1	5V	0°C~60°C
AQ7-IMX6-A10-03	Freescle i.MX6 DualLite-Commercial grade- 1.0GHz	onboard DDR3 1GB	Fanless	HDMI, LVDS, eDP	24b, 1CH	SATA x 1	GbE x 1	USB2.0 x 5 (1 for USB OTG)	PCI-Express [x1] x 1	5V	0°C~60°C

Optional Accessories

- **ECB-970-A10-01**
Qseven Rev. 2.0 Carrier Board for ARM Solution
- **PER-A128**
Heat Spreader, for AQ7-IMX6, Onboard CPU

Starter Kit

- **SKC-AQ7-IMX6-A10**
Starter Kit, AQ7-IMX6-A10-01, ECB-970, 12.1" LVDS, eMMC: Android, SDx2: Linux, Rev1.0