

Qseven™ Module

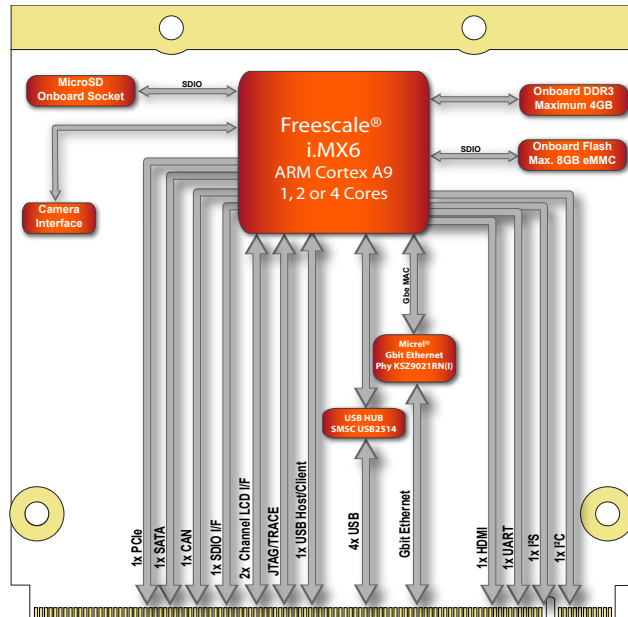
conga-QMX6

Q S E V E N



Formfactor	Qseven Rev. 1.20, 70x70 mm
CPU	<p>Freescall® i.MX6 Solo ARM Cortex A9, 1.0GHz, 512B L2 cache</p> <p>Freescall® i.MX6 Dual ARM Cortex A9, 1.2GHz, 1MB L2 cache</p> <p>Freescall® i.MX6 Quad ARM Cortex A9, 1.2GHz, 1MB L2 cache</p> <p>Freescall® i.MX6 Dual light ARM Cortex A9, 1.0GHz, 512MB L2 cache</p>
DRAM	2 GByte (4 GByte optional) onboard DDR3 memory, 1066 MT/s
Ethernet	Micrel® Gbit Ethernet Phy KSZ9021RN
I/O Interfaces	5x USB 2.0, 2x SATA II(3GB/s), 1x SDIO, 1x PCIe 2.0, I²C Bus, 1x USB OTG client, LPC bus, CAN Bus
Mass Storage	<p>Onboard Solid State Drive (eMMC) up to 8 GByte (optional)</p> <p>Onboard MicroSD socket</p>
Sound	I²S, SPDIF
Graphics	<p>Integrated in Freescall i.MX6 Series</p> <p>Video (VPU), 2D Graphics (GPU2D) and 3D Graphics (GPU3D), 3D graphics with 4 shaders up to 200MT/s, dual stream 1080p/720p decoder/encoder.</p> <p>OpenVG 1.1 processing unit.</p>
Video Interfaces	<p>HDMI</p> <p>Dual HDMI v1.4 support supported by Qseven specification. One channel is supported by directly at the HDMI interface on the Qseven edge card connector. The second port is shared with the LVDS channel #0.</p> <p>LVDS</p> <p>24bit LVDS dual channel up to WUXGA resolution. 1920x1200 pixel and HD1080.</p> <p>Supports 18bit and 24bit dual channel up to WUXGA 1920x1200.</p>
Features	<p>Multi Stage Watchdog Timer</p> <p>I²C bus (fast mode, 400 kHz, multi-master)</p> <p>JTAG debug interface with onboard 10pin 2mm header</p> <p>CAN Interface</p> <p>Camera Interface MIPI CSI-2 on flat foil connector (optional)</p>
Embedded Software Features	U-Boot boot loader
Operating Systems	<p>Android, Windows CE 7.0, Linux, QNX (optional with 3rd party BSP)</p> <p>BSPs with OS drivers and EAPI and tools.</p>
Power Consumption	Typ. application ~3-5 Watt @ 5V
Temperature Range	<p>Operating: 0 to +60°C (opt. -40 to +85°C) eMMC versions max. -20 to +85°C</p> <p>Storage: -40 to +85°C</p>
Humidity	<p>Operating: 10 to 90% r. H. non cond.</p> <p>Storage: 5 to 95% r. H. non cond.</p>
Size	70 x 70 mm (2¾" x 2¾")

Block Diagram



Order Information

Article	PN	Description
conga-QMX6/DC-2G	016100	Qseven ARM module with ultra low power Freescale i.MX6 Cortex A9 dual core 1.2GHz processor with 1024kB L2 cache and 2GB onboard DDR3L memory.
conga-QMX6/QC-2G	016101	Qseven ARM module with ultra low power Freescale i.MX6 Cortex A9 quad core 1.2GHz processor with 1024kB L2 cache and 2GB onboard DDR3L memory.
conga-QMX6/SC-1G	016102	Qseven ARM module with ultra low power Freescale i.MX6 Cortex A9 single core 1.0GHz processor with 512kB L2 cache and 1GB onboard DDR3L memory.
conga-QMX6/DClight-1G	016102	Qseven ARM module with ultra low power Freescale i.MX6 Cortex A9 light dual core 1.0GHz processor with 512kB L2 cache and 1GB onboard DDR3L memory.

Engineering Tools / Accessories for Qseven

conga-QEVAL	007001	Evaluation platform for Qseven
conga-QKIT	077455	Starterkit for Qseven including conga-QEVAL, conga-LDVI/EPI, conga-FPA1, Dual DVI-D ADD2 Card, ATX power supply...
Qseven Mobility Kit	077460	Complete ready-to-use starter-kit for mobile applications
conga-Mini Carrier Board	020710	Qseven mini carrier board for mobile applications.
conga-Mini Carrier cable kit	400015	Cable Kit for Qseven mini carrier board. Consisting of: 4x USB adapter cable, 1x LVDS display cable, 1x Feature connector cable, 1x HDMI to DVI adapter cable.
Qseven MXM carrier board connector	400012	Socket for Qseven Carrier Boards, Foxconn PN:AS0B321-S78N-7F, standard type, SMT, lead free, 230 positions, 0.50mm pitch, 7.8mm height. 1 pcs
conga-LDVI/EPI	011115	LVDS to DVI converter board for digital flat panels with onboard EEPROM
Single DVI-D ADD2 Card	058500	ADD2 display adapter card with single DVI-D digital output. Suitable for all Intel based platforms that support Serial Digital Display Outputs (SDVO) on the standard x16 PCI Express Graphics (PEG) port.