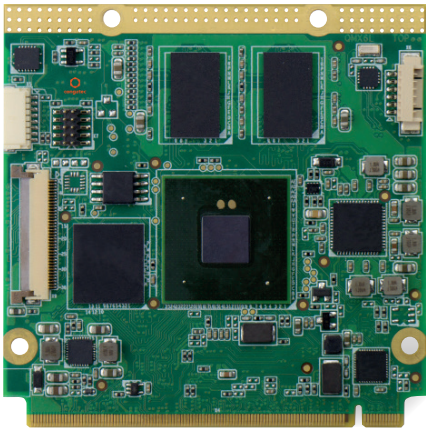


LOW POWER CONSUMPTION

conga-QMX6



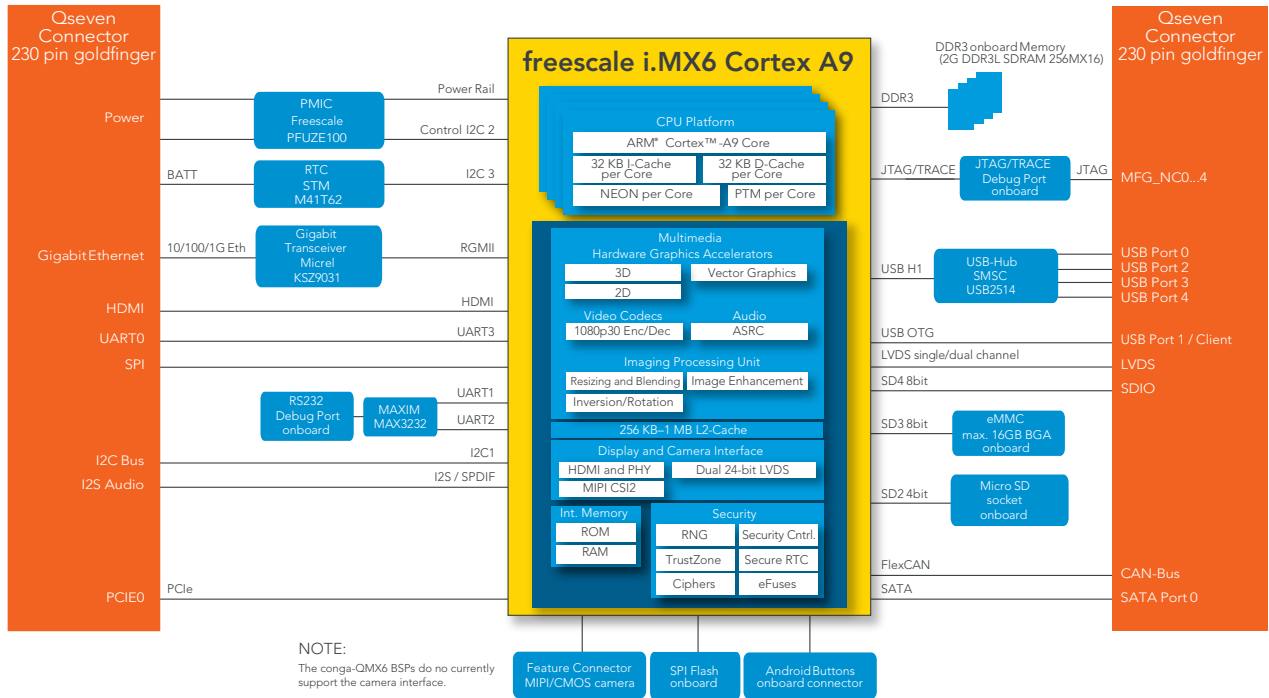
- Up to Freescale i.MX6 Quad ARM Cortex A9
- Multimedia Performance with HDMI & LVDS
- Camera Interface MIPI CSI-2 on flat foil connector
- Extended longevity, min. 10 years
- Temperature range up to -40°C .. +85°C



| | | | |
|------------------------|--|--|----------------|
| Formfactor | Qseven Rev. 2.0 70x70 mm | | |
| CPU | Freescale® i.MX6 ARM Processors | | |
| | Freescale® i.MX6 Solo ARM Cortex A9 | up to 1.0 GHz* | L2 cache 512kB |
| | Freescale® i.MX6 Dual Lite ARM Cortex A9 | up to 1.0 GHz* | L2 cache 512kB |
| | Freescale® i.MX6 Dual ARM Cortex A9 | up to 1.0 GHz* | L2 cache 1MB |
| | Freescale® i.MX6 Quad ARM Cortex A9 | up to 1.0 GHz* | L2 cache 1MB |
| | * Core Frequency: 1.0 GHz for commercial grade 800 MHz for industrial grade | | |
| DRAM | Up to 2 GByte onboard DDR3 memory 1066 MT/s | | |
| Ethernet | 1x 1 Gbit Ethernet | | |
| I/O Interfaces | 5x USB 2.0 (shared with 1x USB OTG client) 1x SATA II (optional) 1x SDIO 1x PCIe 2.0 I ² C Bus CAN Bus SPI | | |
| Mass Storage | Onboard Solid State Drive (eMMC) up to 16 GByte (optional) Onboard MicroSD socket | | |
| Sound | I ² S | | |
| Graphics | Integrated in Freescale i.MX6 Series Video (VPU) 2D Graphics (GPU2D) and 3D Graphics (GPU3D) 3D graphics with 4 shaders up to 200MT/s dual stream 1080p/720p decoder/encoder. OpenGL OpenCL and OpenVG 1.1 | | |
| Video Interfaces | HDMI v1.4 support supported by Qseven specification. 2x LVDS (2x 24 bit) 1x LVDS (1x 24 bit) up to WUXGA resolution 1920x1200 pixel and HD1080. Supports 18bit and 24bit dual channel up to WUXGA 1920x1200. | | |
| Features | Watchdog Timer I ² C bus (fast mode) 400 kHz multi-master) JTAG debug interface CAN interface Camera Interface MIPI CSI-2 on flat foil connector High Precision Real Time Clock | | |
| Embedded BIOS Features | U-Boot boot loader | | |
| Operating Systems | Android Windows Embedded Compact 7 Linux BSPs with OS drivers and tools | | |
| Power Consumption | Typ. application ~3.5 Watt @ 5V | | |
| Temperature | Operating: | 0 to +60°C commercial grade -40 to +85°C industrial grade | |
| | Storage: | -40 to +85°C | |
| Humidity | Operating: | 10 to 90% r. H. non cond. | |
| | Storage: | 5 to 95% r. H. non cond. | |
| Size | 70 x 70 mm (2¾" x 2¾") | | |



conga-QMX6 | Block diagram



conga-QMX6 | Order Information

| Article | PN | Cores | Clock speed | L2 cache | 3D Graphics | 2D Graphics | RAM | SATA |
|--------------------------|--------|-------|---|----------|-------------|-------------|----------------------|---------|
| conga-QMX6/SC-1G eMMC4 | 016100 | 1 | 1 GHz (commercial temperature) | 512 KB | 1 shader | 1 engine | 1 GByte DDR3 400 Mhz | - |
| conga-QMX6/DCL-1G eMMC4 | 016101 | 2 | | 512 KB | 1 shader | 1 engine | 1 GByte DDR3 400 Mhz | - |
| conga-QMX6/DC-1G eMMC4 | 016102 | 2 | | 1 MB | 4 shader | 2 engines | 1 GByte DDR3 533 Mhz | SATA II |
| conga-QMX6/QC-1G eMMC4 | 016103 | 4 | | 1 MB | 4 shader | 2 engines | 1 GByte DDR3 533 Mhz | SATA II |
| conga-QMX6/QC-2G eMMC4 | 016104 | 4 | | 1 MB | 4 shader | 2 engines | 2 GByte DDR3 533 Mhz | SATA II |
| conga-QMX6/iSC-1G eMMC4 | 016110 | 1 | 800MHz (industrial temperature) | 512 KB | 1 shader | 1 engine | 1 GByte DDR3 400MHz | - |
| conga-QMX6/iDCL-1G eMMC4 | 016111 | 2 | | 512 KB | 1 shader | 1 engine | 1 GByte DDR3 400MHz | - |
| conga-QMX6/iDC-1G eMMC4 | 016112 | 2 | | 1 MB | 4 shader | 2 engines | 1 GByte DDR3 533MHz | SATA II |
| conga-QMX6/iQC-1G eMMC4 | 016113 | 4 | | 1 MB | 4 shader | 2 engines | 1 GByte DDR3 533MHz | SATA II |
| QMX6/HSP1-T | 016160 | | Standard heatspreader with 1mm gap pad for Qseven module conga-QMX6 for processors with LIDDED FCBGA package. | | | | | |
| QMX6/HSP2-T | 016161 | | Standard heatspreader with 2mm gap pad for Qseven module conga-QMX6 for processors with plastic MAP BGA package. | | | | | |
| QMX6/HSP3-T | 016162 | | Standard heatspreader with heat stack solution for Qseven module conga-QMX6 for processors with open silicon FCBGA package. | | | | | |

Accessories

| | | |
|----------------------|--------|--|
| conga-HDMI/ADD2 Card | 500025 | The conga-HDMI ADD2 Card is used to connect a HDMI Display directly to the SDVO ADD2-N Slot of the QEVAL |
| conga-LDVI/EPI | 011115 | LVDS to DVI converter board for digital flat panels with on-board EEPROM |
| conga-QKIT/ARM | 077500 | Starterkit for Qseven evaluation arrier boards including conga-QEVAL/ARM |

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