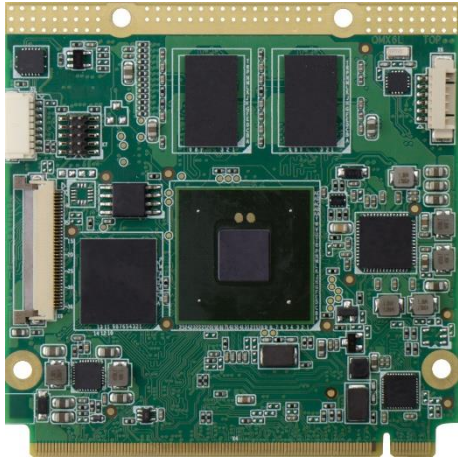


Low-power Qseven with NXP i.MX6

conga-QMX6

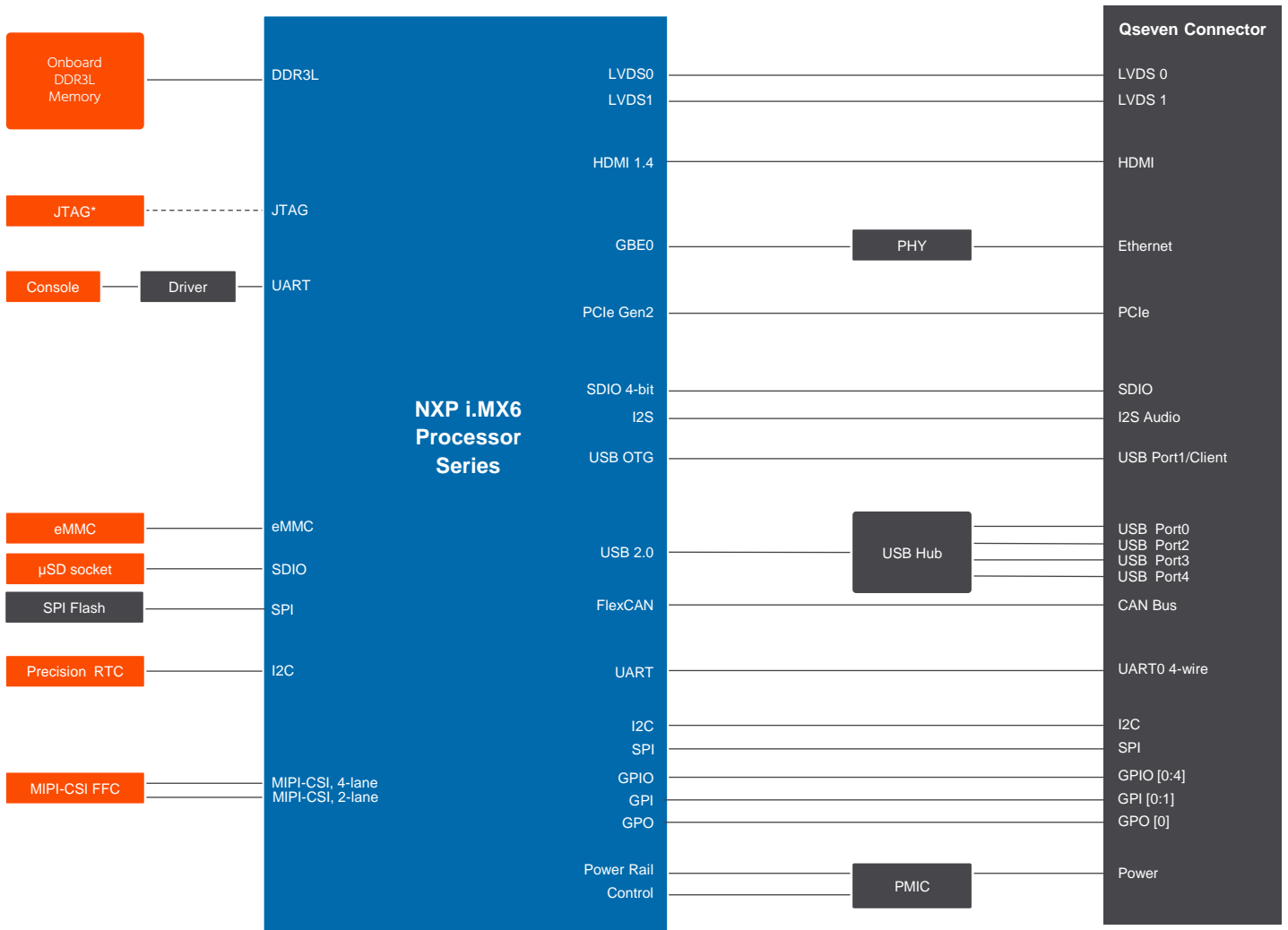


- NXP i.MX6 ARM Cortex-A9 processor series
- Multimedia Performance with HDMI & LVDS
- Camera Interface MIPI CSI-2
- Extended longevity of min. 10 years
- Temperature range up to -40°C .. +85°C



Form factor	Qseven 70x70mm			
CPU SoC	NXP i.MX6 Processors			
		ARM Cortex-A9 (commercial)	ARM Cortex-A9 (industrial)	L2 Cache
	NXP i.MX6 Solo	1 Core @ 1GHz	1 Core @ 800MHz	512kB
	NXP i.MX6 Dual Lite	2 Cores @ 1GHz	2 Cores @ 800MHz	512kB
	NXP i.MX6 Dual	2 Cores @ 1GHz	2 Cores @ 800MHz	1MB
	NXP i.MX6 Quad	4 Cores @ 1GHz	4 Cores @ 800MHz	1MB
DRAM	Up to 4 GByte onboard DDR3 memory 1066 MT/s			
Ethernet	1x Gbit Ethernet			
I/O Interfaces	5x USB 2.0 (shared with 1x USB OTG client) SATA (only i.MX6 Dual/Quad) 1x SDIO 1x PCIe 2.0 I ² C Bus CAN Bus SPI			
Mass Storage	eMMC up to 32 GByte Onboard MicroSD socket			
Sound	1x I ² S			
Graphics	Integrated in NXP i.MX6 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 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 JTAG debug interface MIPI CSI-2 camera interface on flat foil connector High Precision Real Time Clock			
Security	High Assurance Boot support TrustZone® RNG			
Boot Loader	U-Boot boot loader			
Operating Systems	Linux Android			
Power Consumption	Typical application 3-5W @ 5V			
Temperature Range	Operating Temperature Range:		0 to +60°C commercial grade -40 to +85°C industrial grade	
	Storage Temperature Range:		-40 to +85°C	
Humidity	Operating: 10 - 90% r. H. non cond.		Storage: 5 - 95% r. H. non condensing	
Size	70mm x 70 mm			

conga-QMX6 | Block Diagram



* Assembly Option

conga-QMX6 | Order Information

Article	PN	Description
conga-QMX6/SC-1G eMMC32	016300	Qseven module with ultra low power NXP i.MX6 ARM Cortex-A9 1GHz Solo processor, 512kB L2 cache, 1GB onboard DDR3L memory and 32GB onboard eMMC. Commercial temperature range 0°C to 60°C.
conga-QMX6/DCL-1G eMMC32	016301	Qseven module with ultra low power NXP i.MX6 ARM Cortex-A9 1GHz Dual Lite processor, 512kB L2 cache, 1GB onboard DDR3L memory and 32GB onboard eMMC. Commercial temperature range 0°C to 60°C.
conga-QMX6/DC-1G eMMC32	016302	Qseven module with ultra low power NXP i.MX6 ARM Cortex-A9 1GHz Dual processor, 1MB L2 cache, 1GB onboard DDR3L memory and 32GB onboard eMMC. Commercial temperature range 0°C to 60°C.
conga-QMX6/QC-1G eMMC32	016303	Qseven module with ultra low power NXP i.MX6 ARM Cortex-A9 1GHz Quad processor, 1MB L2 cache, 1GB onboard DDR3L memory and 32GB onboard eMMC. Commercial temperature range 0°C to 60°C.
conga-QMX6/QC-2G eMMC32	016304	Qseven module with ultra low power NXP i.MX6 ARM Cortex-A9 1GHz Quad processor, 1MB L2 cache, 2GB onboard DDR3L memory and 32GB onboard eMMC. Commercial temperature range 0°C to 60°C.
conga-QMX6/iSC-1G eMMC32	016310	Qseven module with ultra low power NXP i.MX6 ARM Cortex-A9 800MHz Solo processor, 512kB L2 cache, 1GB onboard DDR3L memory and 32GB onboard eMMC. Industrial temperature range -40°C to 85°C.
conga-QMX6/iDCL-1G eMMC32	016311	Qseven module with ultra low power NXP i.MX6 ARM Cortex-A9 800MHz Dual Lite processor, 512kB L2 cache, 1GB onboard DDR3L memory and 32GB onboard eMMC. Industrial temperature range -40°C to 85°C.
conga-QMX6/iDC-1G eMMC32	016312	Qseven module with ultra low power NXP i.MX6 ARM Cortex-A9 800MHz Dual processor, 1MB L2 cache, 1GB onboard DDR3L memory and 32GB onboard eMMC. Industrial temperature range -40°C to 85°C.
conga-QMX6/iQC-1G eMMC32	016313	Qseven module with ultra low power NXP i.MX6 ARM Cortex-A9 800MHz Quad processor, 1MB L2 cache, 1GB onboard DDR3L memory and 32GB onboard eMMC. Industrial temperature range -40°C to 85°C.
conga-QMX6/iQC-4G eMMC32	016318	Qseven module with ultra low power NXP i.MX6 ARM Cortex-A9 800MHz Dual processor, 1MB L2 cache, 4GB onboard DDR3L memory and 32GB onboard eMMC. Industrial temperature range -40°C to 85°C.
conga-QMX6/HSP1-T	016160	Standard heatspreader with 1mm gap pad for Qseven module conga-QMX6 for processors with LIDDED FCBGA package.
conga-QMX6/HSP2-T	016161	Standard heatspreader with 2mm gap pad for Qseven module conga-QMX6 for processors with plastic MAP BGA package.
conga-QMX6/HSP3-T	016162	Standard heatspreader with heat stack solution for Qseven module conga-QMX6 for processors with open silicon FCBGA package.
conga-QEVAL/Qseven 2.0 ARM	007005	Evaluation carrier board for Qseven ARM modules.
conga-HDMI add-on card	500025	conga-HDMI add-on card for evaluation of the HDMI graphics interface on Qseven modules in combination with the congatec evaluation carrier board conga-QEVAL.
RS232 adapter cable for conga-ARM modules	48000023	RS232 adapter cable for congatec ARM modules console debug application.