

LOW POWER CONSUMPTION

conga-UMX6

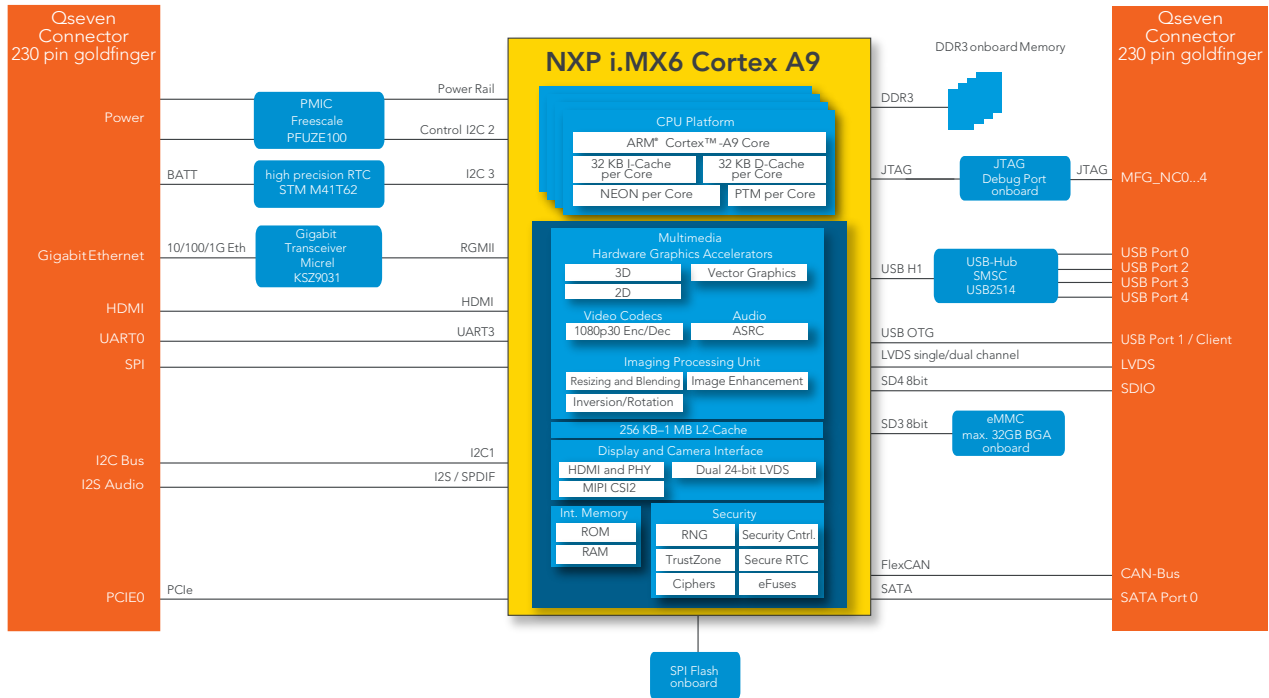


- Up to NXP i.MX6 Dual ARM Cortex A9
- Full HD multimedia performance HDMI & LVDS
- Extended longevity, 10+ years
- Industrial temperature range up to -40°C .. +85°C



Formfactor	μQseven Rev. 2.0 70x40 mm ²		
CPU	NXP i.MX6 ARM Processor		
	NXP i.MX6 Single ARM Cortex A9	up to 1.0 GHz*	L2 cache 512kB
	NXP i.MX6 Dual Lite ARM Cortex A9	up to 1.0 GHz*	L2 cache 512kB
	NXP i.MX6 Dual 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 1 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 32 GByte (optional)		
Sound	I ² S		
Graphics	Integrated in NXP 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 3.0 OpenCL 1.2 OpenVG 1.1		
Video Interfaces	HDMI v1.4 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 Independent display support for LVDS channels		
Features	Watchdog Timer I ² C bus (fast mode, 400 kHz, multi-master) JTAG debug interface High Precision Real Time Clock		
Embedded BIOS Features	U-Boot boot loader		
Operating Systems	Android Windows Embedded Compact 7 & 2013 Linux BSPs with OS drivers and tools at congatec GIT server		
Power Consumption	Typ. application ~2.5 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 40 mm ²		

conga-UMX6 | Block diagram



conga-UMX6 | Order Information

Article	PN	Cores	Clock speed	L2 cache	3D Graphics	2D Graphics	RAM	SATA
conga-UMX6/SC-1G eMMC4	016200	1	1 GHz (commercial temperature)	512 kB	1 shader	1 engine	1 GByte DDR3 533 MHz	1x
conga-UMX6/DC-1G eMMC4	016202	2		1 MB	4 shader	2 engines	1 GByte DDR3 533 MHz	1x
conga-UMX6/DCL-1G eMMC4	016201	2		512 kB	1 shader	1 engine	1 GByte DDR3 400 MHz	-
conga-UMX6/iDC-1G eMMC4	016212	2	800MHz (industrial temperature)	1 MB	4 shader	2 engines	1 GByte DDR3 533 MHz	1x
conga-UMX6/iDCL-1G eMMC4	016211	2		512 KB	1 shader	1 engine	1 GByte DDR3 400 MHz	-

Cooling	PN	Compatible conga-UMX6 Variants (PN)	Description
conga-UMX6/HSP1-T	016250	016212	Standard heatspreader for conga-UMX6 module with Lidded FCBGA CPU. Stand-offs are with 2x M2.5 threaded and 2x borehole 2,7mm variants.
conga-UMX6/HSP2-T	016251	016200 016201 016211	Standard heatspreader for conga-UMX6 module with MAPBGA CPU. Stand-offs are with 2x M2.5 threaded and 2x borehole 2,7mm variants.
conga-UMX6/HSP3-T	016252	016202	Standard heatspreader for conga-UMX6 module with Non-Lidded FCBGA CPU. Stand-offs are with 2x M2.5 threaded and 2x borehole 2,7mm variants.

Accessories	PN	Description
conga-HDMI/ADD2 Card	500025	HDMI ADD2 Card for Qseven evaluation carrier board conga-QEVAL. Suitable for x86 and ARM Qseven modules on conga-QEVAL 2.0.
conga-LDVI/EPI	011115	LVDS to DVI converter board for digital flat panels with onboard EEPROM
conga-QKIT/ARM	077500	Starter kit for Qseven ARM modules. Including conga-QEVAL 2.0/ARM (007005) and accessories
conga-QEVAL/ARM	007005	ARM Evaluation platform for Qseven 2.0 ARM based modules. Based on standard conga-QEVAL with special jumper settings for ARM.