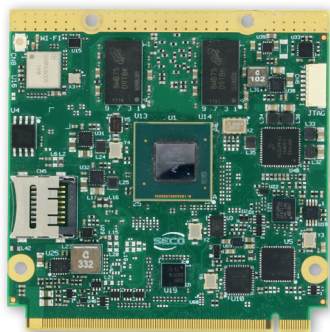




Q7-C25

Qseven® Rel. 2.1 compliant module with NXP i.MX 8M Applications Processors

Qseven® solution for next generation embedded systems



HIGHLIGHTS



CPU
NXP i.MX 8M Applications Processors



CONNECTIVITY
1x USB 3.0; 4x USB2.0; 1x PCI-e x1; 1x CAN Bus; 2x UART; 8x GPIOs



GRAPHICS
Integrated GPU, supports 2 independent displays



MEMORY
up to 4GB soldered down DDR4-2400 memory

Available in Industrial Temperature Range



DEVELOPMENT SAMPLING PRODUCTION



MAIN FIELDS OF APPLICATION



Digital Signage -
Infotainment



Home
Automation



Multimedia
devices



Transportation



Vending

FEATURES

Processor	NXP i.MX 8M Family based on ARM Cortex®-A53 cores + general purpose Cortex®-M4 processor: • i.MX 8M Quad - 4x Cortex®-A53 cores up to 1.5GHz • i.MX 8M Dual - 2x Cortex®-A53 cores up to 1.5GHz • i.MX 8M QuadLite - 4x Cortex®-A53 cores up to 1.5GHz, no VPU	Audio	I2S Audio Interface
Memory	Soldered Down DDR4-2400 memory, dual-channel 32-bit interface, up to 4GB	Serial Ports	1x UART Tx/Rx/RTS/CTS (Optional) 1x Debug UART Optional CAN Bus interface (TTL Level)
Graphics	Integrated Graphics Processing Unit, supports 2 independent displays. Embedded VPU, supports HW decoding of HEVC, H.264, H.263, MPEG-4, MPEG-2, AVC, VC-1, RV, DivX, VP6, VP8, VP9, JPEG (not for i.MX8M QuadLite). Supports OpenGL ES 3.1, Open CL 1.2, OpenGL 2.x, DirectX 11	Other Interfaces	I2C Bus SM Bus Optional SPI interface 8 x GPIOs UltraLow Power RTC Power Management Signals Watchdog
Video Interfaces	HDMI 2.0a / Display Port 1.3 interface, supporting HDCP 2.2 and HDCP 1.4/1.3 eDP interface or 18- / 24-bit Dual Channel LVDS interface	Power Supply	+5V _{DC} ±5% and +5V _{SB} (optional) +3.3V _{RTC}
Video Resolution	HDMI/DP up to 4096 x 2160p60 LVDS/eDP up to 1920 x 1080 @ 60Hz	Operating System	Linux Yocto Android
Mass Storage	eMMC 5.0 drive soldered on-board, up to 64GB Optional microSD slot on board QSPI Flash soldered-onboard	Operating Temperature*	0°C ÷ +60°C (Commercial version) -40°C ÷ +85°C (Industrial version)
Networking	1 x Gigabit Ethernet interface Optional WiFi + BT LE module onboard	Dimensions	70 x 70 mm (2.76" x 2.76")
USB	1 x USB 3.0 OTG Ports Up to 4 x USB 2.0 Host Ports	*Measured at any point of SECO standard heatspreader for this product, during any and all times (including start-up). Actual temperature will widely depend on application, enclosure and/or environment. Upon customer to consider application-specific cooling solutions for the final system to keep the heatspreader temperature in the range indicated.	
PCI-e	1x PCI-e x1 port, optional		

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BLOCK DIAGRAM

