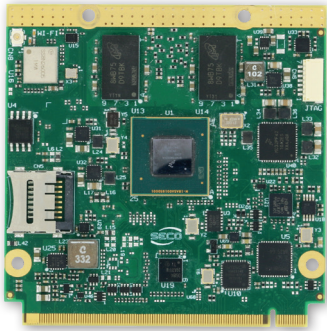




Q7-C25

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; up to 2x PCI-e x1 Gen2; 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



MAIN FIELDS OF APPLICATION



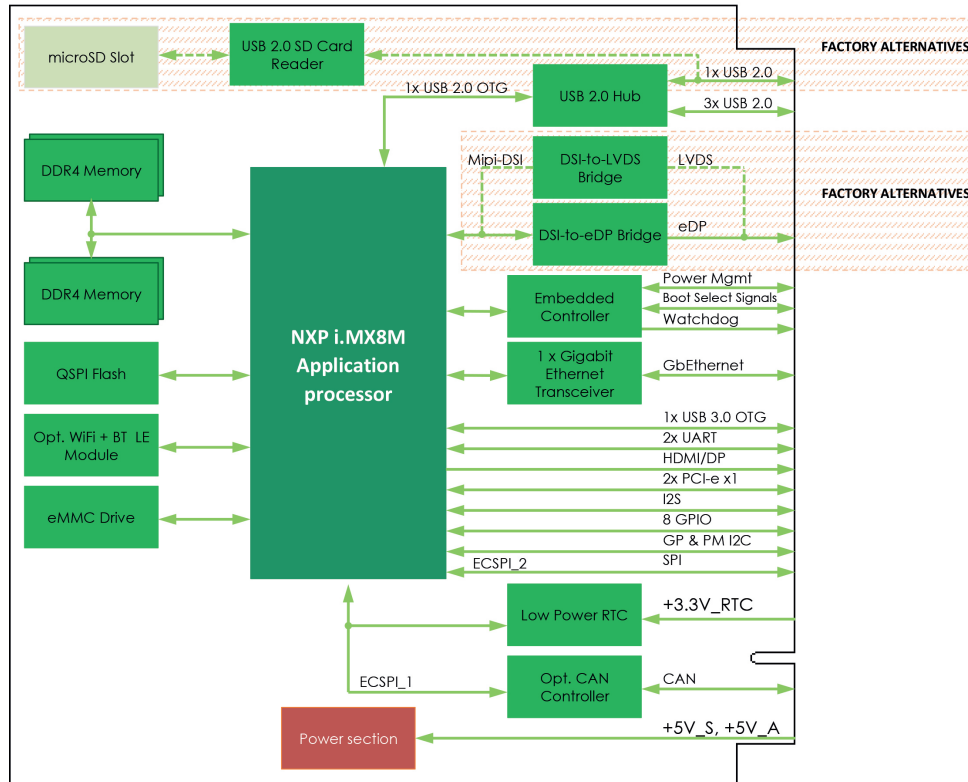
FEATURES

| | | | |
|-------------------------|--|--|--|
| Processor | NXP i.MX 8M Family based on ARM Cortex®-A53 cores + general purpose Cortex®-M4 processor: <ul style="list-style-type: none"> • 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 Host or Client Port 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 | Up to 2 x PCI-e x1 Gen2 ports | | |

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BLOCK DIAGRAM



Information subject to change. Please visit www.seco.com to find the latest version of this datasheet.

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