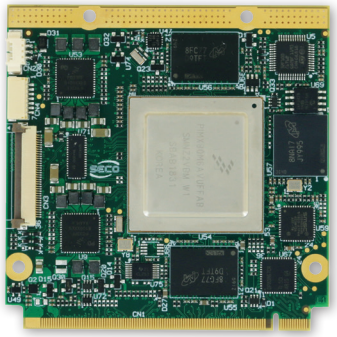
Qseven®

Q7-C26

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

Take advantage of the wide scalability offered by Qseven® form factor and the i.MX 8 family

early access



DEVELOPMENT SAMPLING PRODUCTION

HIGHLIGHTS

CPU
NXP i.MX 8 Applications Processors

CONNECTIVITY
1x USB 3.0; PCI-e x1 Gen3; CSI camera connector; Boot select signal

GRAPHICS
Integrated GPU, supports 2 independent displays

MEMORY
soldered down LPDDR4-3200 memory

Available in Industrial Temperature Range

MAIN FIELDS OF APPLICATION

- Biomedical/ Medical devices
- Digital Signage - Infotainment
- Industrial automation and control
- Smart Vision
- Vending

FEATURES

Processor	NXP i.MX 8 Family: • **i.MX 8QuadMax** - 2x Cortex®-A72 cores + 4x Cortex®-A53 cores + 2x Cortex®-M4F cores • **i.MX 8QuadPlus** - 1x Cortex®-A72 cores + 4x Cortex®-A53 cores + 2x Cortex®-M4F cores • **i.MX 8Quad** - 4x Cortex®-A53 cores + 2x Cortex®-M4F cores
Memory	Soldered Down LPDDR4-3200 memory, 64-bit interface
Graphics	Integrated Graphics Processing Unit, supports 2 independent displays. Embedded VPU, supports HW decoding of HEVC/H.265, AVC/H.264, MPEG-2, VC-1, RV9, VP8, H.263 and MPEG4 part, HW encoding of AVC/H.264 Supports OpenGL ES 3.1, Open CL 1.2, OpenGL 3.x, DirectX 11
Video Interfaces	HDMI 2.0a or DP 1.3 interface, supporting HDCP 2.2 Dual Channel or 2 x Single Channel 18- / 24-bit LVDS interface
Video Resolution	HDMI: Up to 4Kp60 LVDS: Up to 1080p
Mass Storage	1x SATA Gen3 interface (alternative to 1x PCI-e x1 port) eMMC 5.1 drive soldered on-board SD 4-bit interface QSPI Flash soldered-on-board
Networking	1 x Gigabit Ethernet interface
USB	4 x USB 2.0 Host Ports 1 x USB 3.0 Host Port 1 x USB 2.0 OTG port
PCI-e	Up to 2x PCI-e x1 Gen3 ports

Audio	I2S Audio Interface
Serial Ports	1x UART Tx/Rx/RTS/CTS 1x CAN Bus (TTL level)
Other Interfaces	CSI camera connector 2x I2C Bus SPI interface 8 x GPI/Os Boot select signal Power Management Signals Watchdog
Power Supply	$+5V_{DC}$ ±5% +3.3V_RTC
Operating System	Linux Android
Operating Temperature*	0°C ÷ +60°C (Commercial version) -40°C ÷ +85°C (Industrial version)
Dimensions	70 x 70 mm (2.76" x 2.76")

*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.

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

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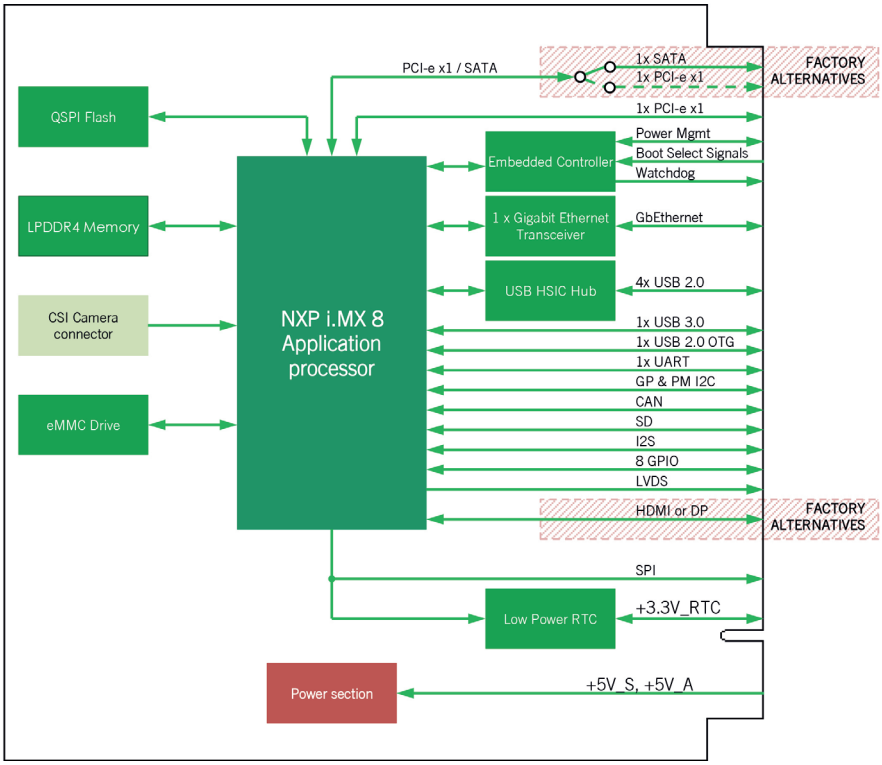
BLOCK DIAGRAM



ORDERING INFORMATION

PN*	DESCRIPTION
QC26-0000-2200-C0	Q7-C26 Qseven - NXP i.MX 8, LVDS

*Additional configurations may be available. Please inquire for more information.

ACCESSORIES

PN	DESCRIPTION
QA42-0000-1111-I0	Carrier Board for Qseven® rel. 2.0 Compliant modules on 3.5" Form factor - DisplayPort - 2nd Ethernet Port - LVDS - Debug Port
QA42-0000-2111-I0	Carrier Board for Qseven® rel. 2.0 Compliant modules on 3.5" Form factor - HDMI - 2nd Ethernet Port - LVDS - Debug Port
QA42-0000-1121-I0	Carrier Board for Qseven® rel. 2.0 Compliant modules on 3.5" Form factor - DisplayPort - 2nd Ethernet Port - eDP - Debug Port
QA42-0000-2121-I0	Carrier Board for Qseven® rel. 2.0 Compliant modules on 3.5" Form factor - HDMI - 2nd Ethernet Port - eDP - Debug Port
QA30-Q7XDK-0000	Qseven® Cross Platform Development Kit 2.0
QA42-Q7XSK-1000	Q7 - Cross Platform Starter Kit 2.0 - DP++ - eDP
QA42-Q7XSK-1100	Q7 - Cross Platform Starter Kit 2.0 - DP++ - LVDS, 7" touch display included
QA42-Q7XSK-2000	Q7 - Cross Platform Starter Kit 2.0 - HDMI - eDP
QA42-Q7XSK-2100	Q7 - Cross Platform Starter Kit 2.0 - HDMI - LVDS, 7" touch display included

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