

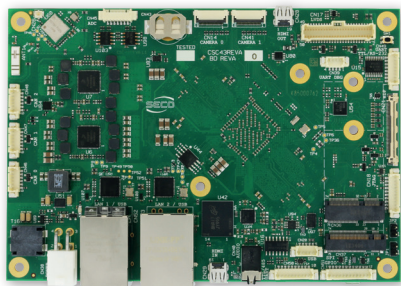
# Single Board Computer



## SBC-C43

SBC with NXP i.MX 8 Applications Processors in 3.5" form factor

Industrial ARM solution for IoT edge computing applications



### HIGHLIGHTS

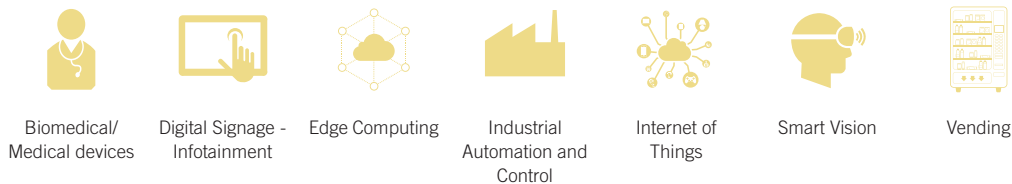
<b>CPU</b> NXP i.MX 8 Family	<b>CONNECTIVITY</b> 2x Gigabit Ethernet interfaces
<b>GRAPHICS</b> 2x Graphics accelerators Vivante GC7000 / XVSX or GC7000Lit/XVSX (QuadPlus and Quad)	<b>MEMORY</b> Soldered down LPDDR4

Available in Industrial Temperature Range



DEVELOPMENT | SAMPLING | PRODUCTION

### MAIN FIELDS OF APPLICATION



### FEATURES

<b>Processor</b>	NXP i.MX 8 Family: <b>i.MX 8QuadMax:</b> 2x ARM Cortex®-A72 + 4x ARM® Cortex®-A53 + 2x Cortex®-M4F <b>i.MX 8QuadPlus:</b> 1x ARM Cortex®-A72 + 4x ARM® Cortex®-A53 + 2x Cortex®-M4F <b>i.MX 8Quad:</b> 4x ARM® Cortex®-A53 + 2x Cortex®-M4F	<b>USB</b>	1 x USB 3.0 Host port on Type-A socket 1x USB 2.0 OTG port on micro-AB socket 1x USB 2.0 Host port on external Type-A socket 1x USB 2.0 Host port on internal connector 2 x USB 2.0 ports available on M.2 Key B and Key E slots
<b>Max Cores</b>	8	<b>PCI-e</b>	2x PCI-e x1 ports, available on M.2 Socket 1 Key E and on M.2 Socket 2 Key B (pin shared with SATA interface) Slots
<b>Memory</b>	Soldered down LPDDR4 memory, 64-bit interface, 1600MHz. Base configuration 2GB, up-scalable to 4GB, 6GB, 8GB	<b>Audio</b>	I2S Audio Codec Mic In and Line Out interfaces, available on a single combo TRRS connector
<b>Graphics</b>	2x Graphics accelerators Vivante GC7000 / XVSX or GC7000Lit/XVSX (QuadPlus and Quad) 1x embedded VPU, supporting H.265 (4K30) and H.264 (1080p60) decoding and H.264 (1080p30) encoding Supports 4 independent video outputs (total combined resolution 4K)	<b>Serial Ports</b>	1x UART (RS-232 level) 1x UART RS-485/RS-422 configurable 1x UART TTL level 3x CAN interfaces
<b>Video Interfaces</b>	<b>OUTPUTS:</b> HDMI 2.0a Tx interface Optional eDP 1.4 interface Single/Dual-Channel 18-/24-bit LVDS interface <b>INPUTS:</b> HDMI 2.0a Rx interface 2x 4-lanes MIPI-CSI Camera interfaces	<b>Other Interfaces</b>	4x Analog Inputs 6x GPIOs SPI interface I2C interface Embedded additional RTC circuitry for lowest power consumption SIM dedicated slot + programmable electronic SIM on-board
<b>Video Resolution</b>	HDMI, eDP: Up to UltraHD (4K) LVDS: up to 1080p	<b>Power Supply</b>	+12V <sub>DC</sub> ± 10%
<b>Mass Storage</b>	eMMC 5.1 Drive soldered on-board, up to 32GB 1x S-ATA interface available on M.2 Socket 2 Key B Slot (interface shared with PCI-e x1) microSD Card Slot 4MB QuadSPI Flash NAND (boot device only)	<b>Operating System</b>	Wind River Linux Yocto Android
<b>Networking</b>	2x Gigabit Ethernet interfaces Combo WiFi 802.11 a/b/g/n/ac + BT LE 4.2 module with ceramic SMT antennas on-board M.2 Socket 2 Key B Slot for M.2 Modems M.2 Socket1 Key E Slot for WiFi + BT external modules	<b>Operating Temperature*</b>	0°C ÷ +60°C (Commercial version) -40°C ÷ +85°C (Industrial version)
		<b>Dimensions</b>	146 x 102 mm (5,75" x 4,02")

\*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.

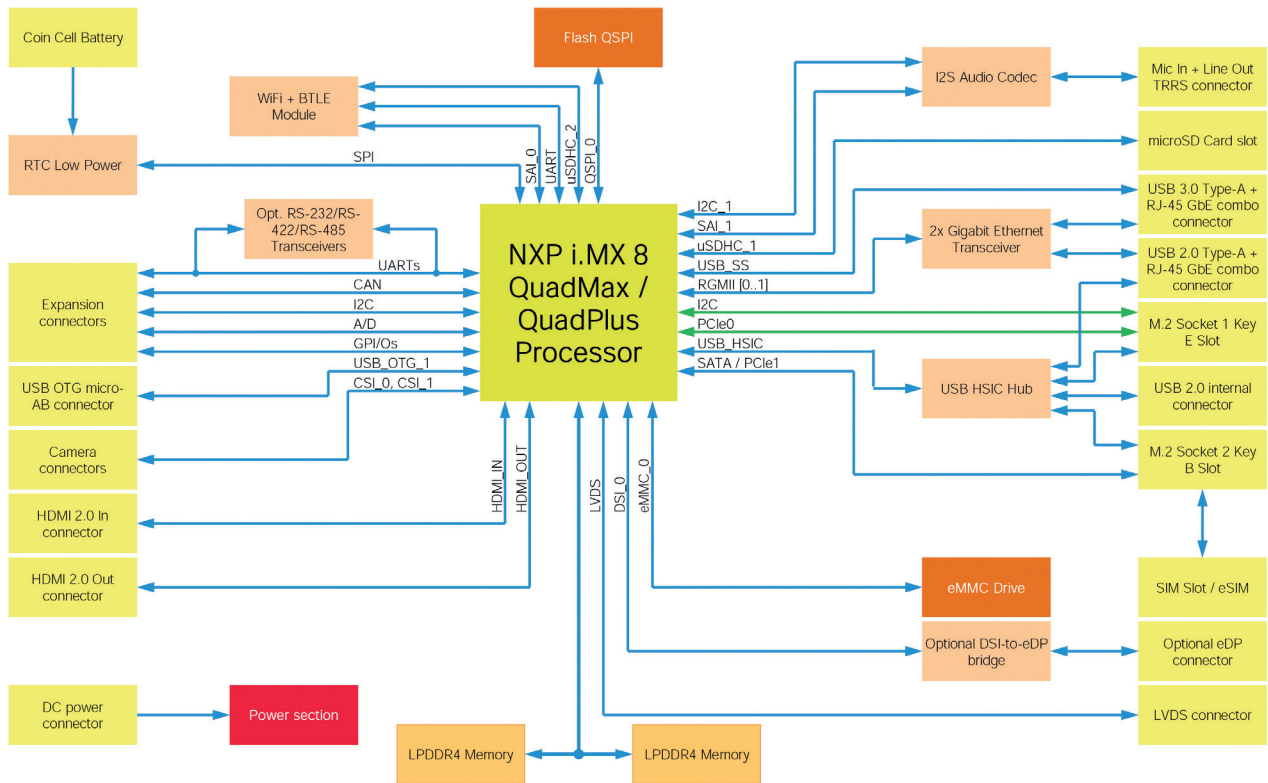


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# SBC-C43

## SBC with NXP i.MX 8 Applications Processors in 3.5" form factor

### BLOCK DIAGRAM



Information subject to change. Please visit [www.seco.com](http://www.seco.com) to find the latest version of this datasheet.

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