

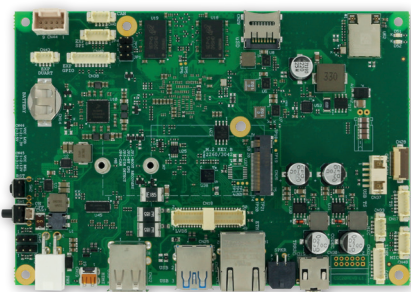
# Single Board Computer



## SBC-C20

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

A new generation of cost effective solutions for multimedia and industrial IoT applications



### HIGHLIGHTS

**CPU**  
NXP i.MX 8M Family

**CONNECTIVITY**  
WiFi ac/a/b/g/n + BT LE 5; M.2 WWAN slot; microSIM slot for M.2 modem

**GRAPHICS**  
Vivante GC7000Lite GPU

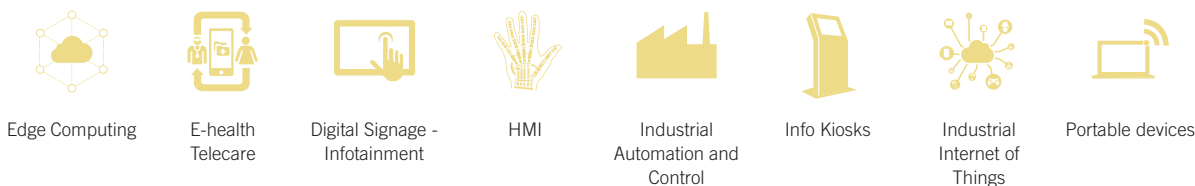
**MEMORY**  
Soldered down DDR3L memory

Available in Industrial Temperature Range



DEVELOPMENT SAMPLING PRODUCTION

### MAIN FIELDS OF APPLICATION



### FEATURES

<b>Processor</b>	NXP i.MX 8M Family, based on ARM® Cortex®-A53 MPCore + Cortex-M4 core platform: <b>i.MX 8M Quad</b> - Quad core up to 1.5GHz <b>i.MX 8M QuadLite</b> - Quad core up to 1.5 GHz per core <b>i.MX 8M Dual</b> - Dual core up to 1.5 GHz per core	<b>Audio</b>	I2S Audio Codec Speaker + Microphone + Earphone interfaces on internal pin headers Line Out + Mic In combo TRRS audio jack Optional 10W for channel amplified Speaker connector
<b>Memory</b>	Soldered down DDR3L memory, up to 2GB	<b>Serial Ports</b>	RS-232 Serial port connector Debug UART on internal pin header CAN Port
<b>Graphics</b>	Vivante GC7000Lite GPU, supporting OpenGL ES 1.1 / 2.0 / 3.0 / 3.1, Open CL 1.2 and Vulkan Dedicated VPU (not for QuadLite), supporting 4Kp60 HEVC/H.265 main and main 10 decoder, 4Kp60 VP9 decoder, 4Kp30 AVC/H.264 decoder, 1080p60 MPEG-2, MPEG-4p2, VC-1, VP8, RV9, AVS, MJPEG, H.263 decoder Dual Display support	<b>Other Interfaces</b>	microSIM slot for M.2 modems SPI interface I2C Touch Screen dedicated connector 8 x GPIOs connector SPI Connector
<b>Video Interfaces</b>	embedded Display Port 1.4 connector (switched with HDMI) Optional LVDS interface Optional HDMI 1.4 / 2.0a interface (switched with eDP) 4-lane MIPI CSI Camera interface	<b>Power Supply</b>	+12V <sub>DC</sub> Coin cell battery for RTC
<b>Video Resolution</b>	HDMI, eDP: up to 4096x2160 LVDS: up to 1920x1080	<b>Operating System</b>	Linux Android
<b>Mass Storage</b>	Optional eMMC drive on-board, up to 16GB microSD Card slot	<b>Operating Temperature*</b>	0°C ÷ +60°C (Commercial version) -40°C ÷ +85°C (industrial version, only boards without optional WiFi module)
<b>Networking</b>	Optional WiFi ac/a/b/g/n + BT 5 module with onboard U.FL antenna connectors Gigabit Ethernet port M.2 Socket 2 2260 / 3042 Key B slot for WWAN modules (modem)	<b>Dimensions</b>	101.6 x 147 mm (4" x 5.78")
<b>USB</b>	USB Device on USB 2.0 micro-AB connector (interface shared with USB 3.0 port) USB 3.0 Type-A connector (interface shared with USB 2.0 micro-AB) USB 2.0 Dual Type-A connector Optional USB 2.0 internal T/S connector (excludes one USB 2.0 Type-A interface)	*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.	

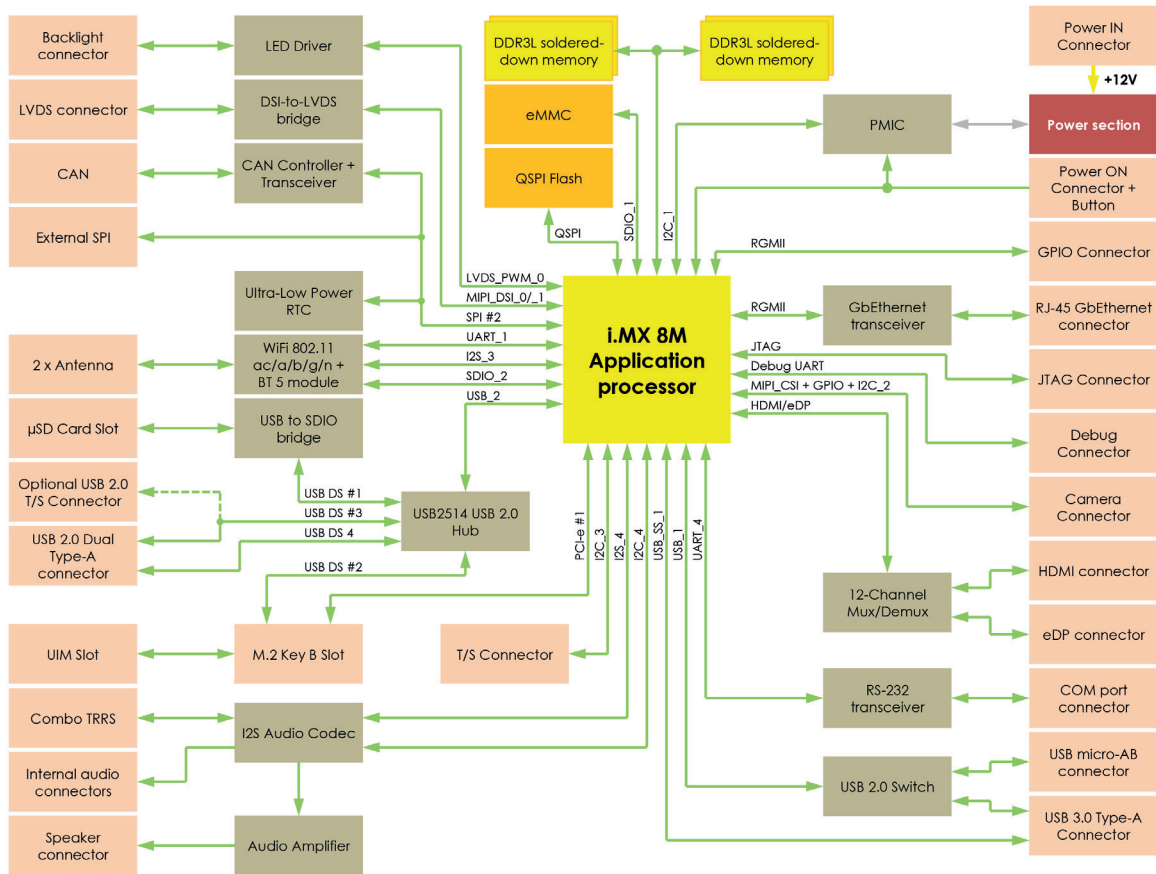


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# SBC-C20

## SBC with NXP i.MX 8M 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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