

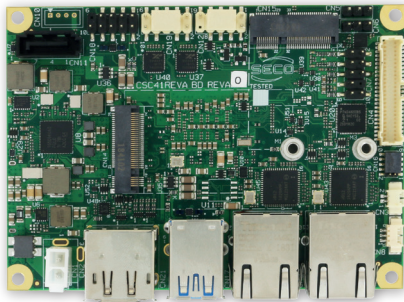
# Single Board Computer



## SBC-C41-pITX

Pico-ITX SBC with the Intel® Atom™ X Series, Intel® Celeron® J / N Series and Intel® Pentium® N Series (formerly Apollo Lake) Processors

x86 solution designed for IoT edge computing in harsh environments



### HIGHLIGHTS

<b>CPU</b> Intel® Atom™ X Series, Intel® Celeron® J / N Series and Intel® Pentium® N Series (formerly Apollo Lake) Processors	<b>CONNECTIVITY</b> 2x GbE; M.2 WWAN and WLAN slots; 8x GPIOs
<b>GRAPHICS</b> Integrated Intel® HD Graphics 500 series controller with up to 18 Execution Units	<b>MEMORY</b> Up to 8GB LPDDR4 memory

Available in Industrial Temperature Range



### MAIN FIELDS OF APPLICATION



Edge Computing



Industrial Automation and Control



Info Kiosks



Internet of Things



Surveillance



Telco



Transportation

### FEATURES

<b>Processor</b>	Intel® Atom™ <b>x5-E3930</b> Dual Core @1.3 GHz (Burst 1.8GHz), 2MB L2 Cache, 6.5W TDP Intel® Atom™ <b>x5-E3940</b> Quad Core @1.6 GHz (Burst 1.8GHz), 2MB L2 Cache, 9.5W TDP Intel® Atom™ <b>x7-E3950</b> Quad Core @1.6 GHz (Burst 2.0GHz), 2MB L2 Cache, 12W TDP Intel® Pentium® <b>N4200</b> Quad Core @1.1GHz (Burst 2.5GHz), 2MB L2 Cache, 6W TDP Intel® Celeron® <b>N3350</b> Dual Core @1.1GHz (Burst 2.4GHz), 2MB L2 Cache, 6W TDP Intel® Celeron® <b>J3455</b> , Quad Core @1.5GHz (Burst 2.3GHz), 2MB L2Cache, 10W TDP Intel® Celeron® <b>J3355</b> , Dual Core @2.0GHz (Burst 2.5GHz), 2MB L2Cache, 10W TDP	<b>Networking</b>	Dual Gigabit Ethernet connector WWAN (modem) M.2 Socket 2 Key B 2260 / 3042 slot (excludes SSD interface) Connectivity M.2 Socket 1 Key E 2230 Slot for WiFi+BTLE modules
<b>Max Cores</b>	4	<b>USB</b>	USB 3.0 Dual Type-A connector Internal USB 2.0 Dual pin header
<b>Max Thread</b>	4	<b>Audio</b>	HD Audio Codec Line Out + Microphone + S/PDIF Out interfaces on internal pin header
<b>Memory</b>	32-bit Single-/Dual-/Quad-Channel LPDDR4 soldered on-board, up to 2400 MT/s Max memory size 8GB	<b>Serial Ports</b>	2 x RS-232/RS-422/RS-485 Serial ports on internal pin header
<b>Graphics</b>	Integrated Intel® HD Graphics 500 series controller with up to 18 Execution Units Three Independent displays supported HW decoding of HEVC(H.265), H.264, MVC, VP8, VP9, MPEG2, VC-1, WMV9, JPEG/MJPEG formats HW encoding of HEVC(H.265), H.264, MVC, VP8, VP9 and JPEG/MJPEG formats	<b>Other Interfaces</b>	miniSIM slot for M.2 modems (combo with microSD slot) 8 x GPIOs connector FAN connector Switch / LED Front Header connector I2C + INT# + RST# signals for I2C Touch Screen controller on LVDS connector Optional TPM 2.0 on-board
<b>Video Interfaces</b>	HDMI connector Optional DP++ connector (combo with HDMI) LVDS connector	<b>Power Supply</b>	+12V <sub>DC</sub> Cabled coin cell battery for RTC
<b>Video Resolution</b>	HDMI: up to 3840x2160 @ 30Hz DP++: up to 4096x2160 @ 60Hz LVDS: up to 1920x1200 @ 60Hz	<b>Operating System</b>	Windows 10 Enterprise (64-bit) Windows 10 IoT Core (32- / 64-bit) WindRiver Linux 64-bit Yocto (64-bit) Android (planning)
<b>Mass Storage</b>	Optional eMMC 5.0 drive on-board SATA Gen3 7p M connector SSD M.2 Socket 2 Key B lot, size 2260 / 3042 (excludes WWAN modules) microSD Card slot (combo with miniSIM slot)	<b>Operating Temperature*</b>	0°C ÷ +60°C (Commercial version) -40°C ÷ +85°C (industrial version)
		<b>Dimensions</b>	100 x 72 mm (3,93" x 2,83")

\*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.

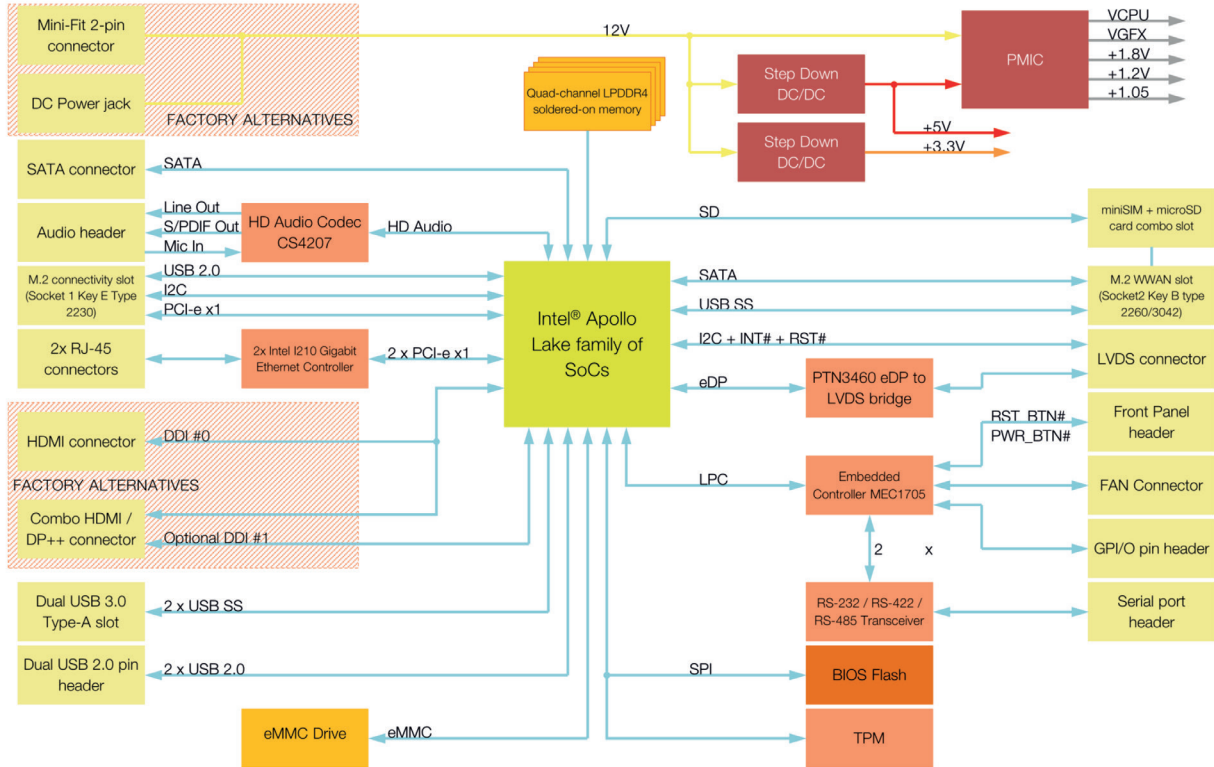


edge.seco.com

# SBC-C41-pITX

Pico-ITX SBC with the Intel® Atom™ X Series, Intel® Celeron® J / N Series and Intel® Pentium® N Series (formerly Apollo Lake) Processors

## BLOCK DIAGRAM



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

354.21