

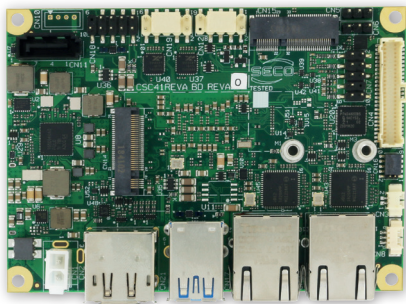
Single Board Computer



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

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

Processor	Intel® Atom™ x5-E3930 Dual Core @1.3 GHz (Burst 1.8GHz), 2MB L2 Cache, 6.5W TDP Intel® Atom™ x5-E3940 Quad Core @1.6 GHz (Burst 1.8GHz), 2MB L2 Cache, 9.5W TDP Intel® Atom™ x7-E3950 Quad Core @1.6 GHz (Burst 2.0GHz), 2MB L2 Cache, 12W TDP Intel® Pentium® N4200 Quad Core @1.1GHz (Burst 2.5GHz), 2MB L2 Cache, 6W TDP Intel® Celeron® N3350 Dual Core @1.1GHz (Burst 2.4GHz), 2MB L2 Cache, 6W TDP Intel® Celeron® J3455 , Quad Core @1.5GHz (Burst 2.3GHz), 2MB L2Cache, 10W TDP Intel® Celeron® J3355 , Dual Core @2.0GHz (Burst 2.5GHz), 2MB L2Cache, 10W TDP	Networking	Dual Gigabit Ethernet connector WWAN (modem) M.2 Socket 2 Key B 2242 / 3042 slot (excludes SSD interface) Connectivity M.2 Socket 1 Key E 2230 Slot for WiFi+BTLE modules
Max Cores	4	USB	USB 3.0 Dual Type-A connector Internal USB 2.0 Dual pin header
Max Thread	4	Audio	HD Audio Codec Line Out + Microphone + S/PDIF Out interfaces on internal pin header
Memory	32-bit Single-/Dual-/Quad-Channel LPDDR4 soldered on-board, up to 2400 MT/s Max memory size 8GB	Serial Ports	2 x RS-232/RS-422/RS-485 Serial ports on internal pin header
Graphics	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	Other Interfaces	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
Video Interfaces	HDMI connector Optional DP++ connector (combo with HDMI) LVDS connector	Power Supply	+12V _{DC} Cabled coin cell battery for RTC
Video Resolution	HDMI: up to 3840x2160 @ 30Hz DP++: up to 4096x2160 @ 60Hz LVDS: up to 1920x1200 @ 60Hz	Operating System	Windows 10 Enterprise (64-bit) Windows 10 IoT Core (32- / 64-bit) WindRiver Linux 64-bit Yocto (64-bit) Android (planning)
Mass Storage	Optional eMMC 5.0 drive on-board SATA Gen3 7p M connector SSD M.2 Socket 2 Key B lot, size 2242 / 3042 (excludes WWAN modules) microSD Card slot (combo with miniSIM slot)	Operating Temperature*	0°C ÷ +60°C (Commercial version) -40°C ÷ +85°C (industrial version)
		Dimensions	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.

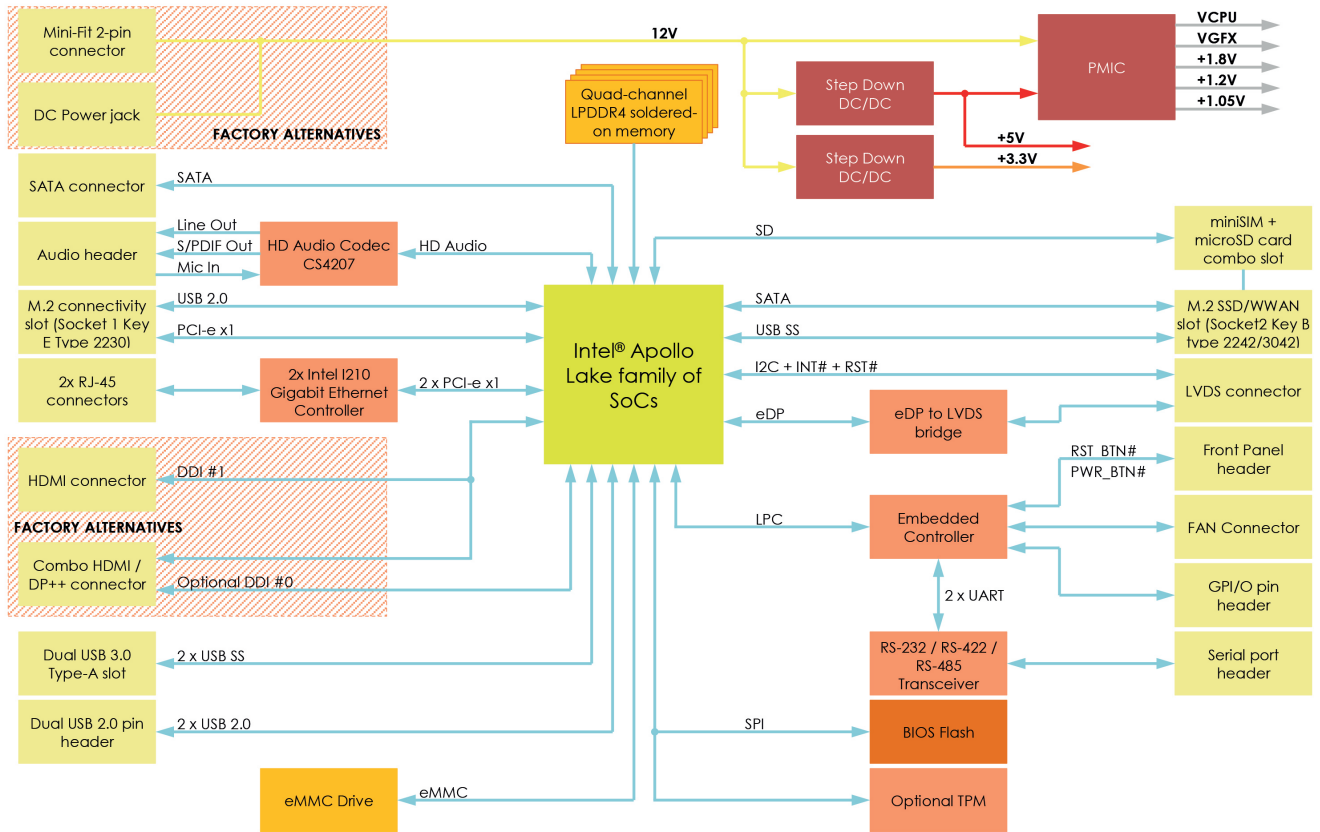


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BLOCK DIAGRAM



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

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