

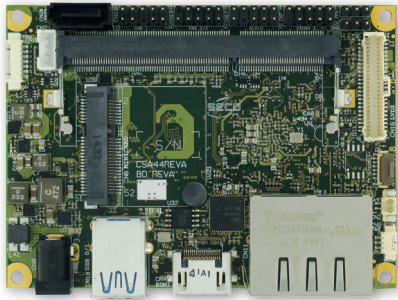
Single Board Computer



SBC-A44-pITX

Pico-ITX SBC with Intel® Atom™ E3800 family (formerly Bay Trail) SoCs and ECC DDR3L memory

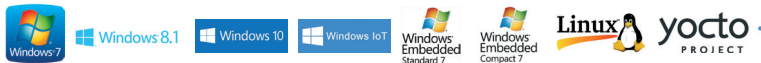
Limitless Embedded applications



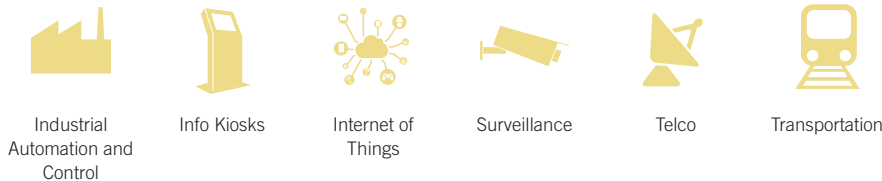
HIGHLIGHTS

CPU Intel® Atom™ E3800 family of System-on-Chip	CONNECTIVITY 2x GbE; Half miniPCI-e slot; 8x GPIOs
GRAPHICS Integrated Intel® HD Graphics controller	MEMORY Up to 8GB DDR3L ECC SO-DIMM

Available in Industrial Temperature Range



MAIN FIELDS OF APPLICATION



FEATURES

Processor	Intel® Atom™ E3845 , Quad Core @1.91GHz, 2MB Cache, 10W TDP Intel® Atom™ E3827 , Dual Core @1.75GHz, 1MB Cache, 8W TDP Intel® Atom™ E3826 , Dual Core @1.46GHz, 1MB Cache, 7W TDP Intel® Atom™ E3825 , Dual Core @1.33GHz, 1MB Cache, 6W TDP Intel® Atom™ E3815 , Single Core @1.46GHz, 512KB Cache, 5W TDP Intel® Atom™ E3805 , Dual Core @1.33GHz, 1MB Cache, 3W TDP	Other Interfaces	8 x GPIO FAN connector Switch / LED Front Header I2C connector with INT and RST# signals
Max Cores	4	Serial Ports	2 x optional RS-232 / RS-422 / RS-485 Serial ports on internal pin Header
Max Thread	4	Power Supply	12V _{DC} ± 5% RTC Battery with lead cable and connector
Memory	Up to 8GB on DDR3L-1333 ECC SO-DIMM Slot (DDR3L-1333 with E3845 and E3827, DDR3L-1067 the others). Integrated Intel® HD Graphics 4000 series controller (not for E3805)	Operating System	Microsoft® Windows 7 (32/64 bit) Microsoft® Windows 8.1 (32/64 bit) Microsoft® Windows 10 (32/64 bit) Microsoft® Windows 10 IoT Microsoft® Windows Embedded Standard 7 (32/64 bit) Microsoft® Windows Embedded Compact 7 Linux (32/64 bit) Yocto
Graphics	Dual independent display support HW decoding of H.264, MPEG2, MVC, VC1, VP8, MJPEG formats HW encoding of H.264, MPEG2 and MVC formats	Operating Temperature*	0°C ÷ +60°C (Commercial temperature) -40° ÷ +85°C (Industrial temperature)
Video Interfaces	HDMI connector Single / Dual Channel 18- / 24-bit LVDS connector	Dimensions	72 x 100 mm (2.83" x 3.93")
Video Resolution	HDMI, resolution up to 1080p @ 60Hz LVDS, resolution up to 1920 x 1200	*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.	
Mass Storage	Optional eMMC drive on-board 1 x standard SATA connector mini mSATA interface on miniCard slot (shared with miniPCI-e) microSD Card slot		
Networking	Dual Gigabit Ethernet connector		
USB	2 x USB 3.0 Host ports on Dual Type-A socket 2 x USB 2.0 Host ports on internal pin header 1 x USB 2.0 Host port on miniPCI-e slot		
PCI-e	Half miniPCI-e slot (shared with mSATA)		
Audio	Optional HD Audio Codec Cirrus Logic CS4207 Mic In, Line out internal pin header connector		



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BLOCK DIAGRAM

