

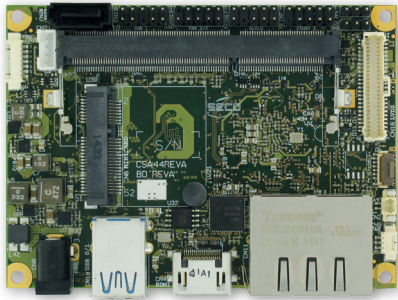
# Single Board Computer



## LAMPOS

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

### Limitless Embedded applications



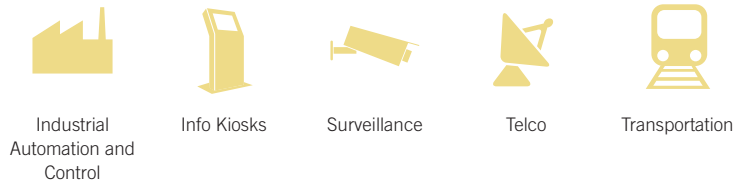
#### HIGHLIGHTS

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

Available in Industrial Temperature Range



#### MAIN FIELDS OF APPLICATION



#### FEATURES

<b>Processor</b> Intel® Atom™ <b>E3845</b> , Quad Core @1.91GHz, 2MB Cache, 10W TDP Intel® Atom™ <b>E3827</b> , Dual Core @1.75GHz, 1MB Cache, 8W TDP Intel® Atom™ <b>E3826</b> , Dual Core @1.46GHz, 1MB Cache, 7W TDP Intel® Atom™ <b>E3825</b> , Dual Core @1.33GHz, 1MB Cache, 6W TDP Intel® Atom™ <b>E3815</b> , Single Core @1.46GHz, 512KB Cache, 5W TDP Intel® Atom™ <b>E3805</b> , Dual Core @1.33GHz, 1MB Cache, 3W TDP	<b>Other Interfaces</b> 8 x GPIO FAN connector Switch / LED Front Header I2C connector with INT and RST# signals
<b>Max Cores</b> 4	<b>Serial Ports</b> 2 x optional RS-232 / RS-422 / RS-485 Serial ports on internal pin Header
<b>Max Thread</b> 4	<b>Power Supply</b> 12V <sub>DC</sub> ± 5% RTC Battery with lead cable and connector
<b>Memory</b> 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)	<b>Operating System</b> 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
<b>Graphics</b> Dual independent display support HW decoding of H.264, MPEG2, MVC, VC1, VP8, MJPEG formats HW encoding of H.264, MPEG2 and MVC formats	<b>Operating Temperature*</b> 0°C ÷ +60°C (Commercial temperature) -40° ÷ +85°C (Industrial temperature)
<b>Video Interfaces</b> HDMI connector Single / Dual Channel 18- / 24-bit LVDS connector	<b>Dimensions</b> 72 x 100 mm (2.83" x 3.93")
<b>Video Resolution</b> 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.
<b>Mass Storage</b> Optional eMMC drive on-board 1 x standard SATA connector mini mSATA interface on miniCard slot (shared with miniPCI-e) microSD Card slot	
<b>Networking</b> Dual Gigabit Ethernet connector	
<b>USB</b> 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	
<b>PCI-e</b> Half miniPCI-e slot (shared with mSATA)	
<b>Audio</b> Optional HD Audio Codec Cirrus Logic CS4207 Mic In, Line out internal pin header connector	



# LAMPOS

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### BLOCK DIAGRAM

