



## EMS-BYT

### Intel® Celeron®/Atom™ SoC Processor J1900/E3845 Fanless Rugged Embedded System



- > Onboard Intel® Celeron®/Atom™ J1900/E3845 BGA Processor
- > One 204-pin SODIMM Socket Up to 8GB DDR3L 1333MHz SDRAM
- > Rich I/O, 1 VGA, 1 LAN, 1 SIM Card Slot, 1 Swappable HDD, 1 Mic-In, 1 Line-In, 1 Line-Out, 1 12-bit GPIO, 1 SMBUS, 2 COM, 2 PS/2 for KB & MS, 2 Knockouts Antenna Mounting, 3 USB
- > Expansion Slot Supports 2 Mini PCIe Slot & IET Interface
- > Front Access Swappable 2.5" Drive Bay, SIM Card
- > Rugged Design for Vibration & Shock Protection
- > Fanless Operating from -15 ~ 60°C & -40 ~ 75°C
- > Wide Range DC Power Input from 12 ~ 26V
- > Service Window, Easy to Install mSATA, Memory and Mini PCIe Module

#### + Spec

System Information	
<b>Processor</b>	Intel® Celeron® J1900 4-Core 2.0GHz processor Intel® Atom™ E3845 4-Core 1.91GHz processor
<b>System Memory</b>	1 x 204-Pin DDR3L 1333MHz SO-DIMM up to 8 GB
<b>Watchdog Timer</b>	H/W Reset, 1sec. ~ 65535sec.
<b>H/W Status Monitor</b>	Monitoring CPU & System Temperature and Voltage
<b>SBC</b>	EBM-BYTS
Expansion	
<b>Expansion</b>	1 x Avalue 80-Pin IET Interface 2 x Mini PCIe
Storage	
<b>Storage</b>	1 x 2.5" Drive Bay 1 x mSATA
I/O	
<b>USB Port</b>	1 x USB 3.0 2 x USB 2.0
<b>COM Port</b>	2 x RS-232/422/485 (BIOS)
<b>GPIO</b>	1 x 12bit GPIO
<b>Other</b>	1 x SIM Card Slot 1 x SMBus 2 x PS2/ KB & MS 2 x Knockouts for Antenna Mounting
Display	
<b>Graphic Chipset</b>	Intel® Valleyview SoC integrated Graphics
<b>Spec. &amp; Resolution</b>	VGA: Max. resolution 2560x1080 @ 60Hz
Audio	
<b>Audio Codec</b>	Realtek ALC888S
<b>Audio Interface</b>	Mic-In, Line-In and Line-Out
Certifications	
<b>Certification Information</b>	CE FCC Class B
Ethernet	
<b>LAN Chipset</b>	1 x Intel® I211AT
<b>Ethernet Interface</b>	10/100/1000 Base-Tx GbE compatible
<b>LAN Port</b>	1 x RJ-45
Power Requirement	
<b>DC Input</b>	+12V ~ +26V TVS component for surge protection Reverse current/voltage protection
<b>DC Input Connector</b>	Lockable DC Jack
<b>ACPI</b>	Single Power ATX Support S0, S3, S4, S5 ACPI 5.0 Compliant
<b>Power Mode</b>	AT/ATX (ATX is default setting)
<b>Adapter</b>	Input: 100 ~ 240Vdc/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A Adapter) AC-DC Adapter
Mechanical & Environmental	
<b>Operating Temperature</b>	(w/SSD, mSATA), ambient w/ air flow -15°C ~ 60°C (5°F ~ 140°F) (w/HDD), ambient w/ air flow 0°C ~ 45°C (32°F ~ 113°F) For Valleyview I SoC (w/SSD, mSATA), ambient w/ air flow -40°C ~ 75°C (-40°F ~ 167°F)



<b>Storage Temperature</b>	-30°C ~ 70°C (-22°F ~ 158°F)
<b>Operating Humidity</b>	40°C @ 95% Relative Humidity, Non-condensing
<b>Dimension (W x L x H)</b>	9.45" x 6.69" x 1.77" (240mm x 170mm x 45mm)
<b>Vibration Test</b>	With SSD/mSATA : 5Grms, IEC 60068-2-64, Random, 5 ~ 500Hz, 1hr/axis
<b>Shock Test</b>	With SSD/mSATA : 50Grms, IEC 60068-2-27, Half Sine, 11ms
<b>Mounting Kit</b>	Wall Mount kit (Standard) VESA Mount kit (Optional)
<b>Construction</b>	Aluminum + Metal + Plastic
<b>Software Support</b>	
<b>OS Information</b>	Win 7 Win 8 Linux
<b>Ordering Information</b>	
<b>Ordering Information</b>	EMS-BYT-1900-B1-1R Intel® Celeron® SoC Processor J1900 Fanless Rugged Embedded System  EMS-BYT-3845-B1-1R Intel® Atom™ SoC Processor E3845 Fanless Rugged Embedded System