

# ABP-2845A

Slim Embedded System with Quad Core Intel® Atom™ E3845, 4 Gigabit LAN, 6 COM with 2 Isolated, 5 USB, 8 GPIO, Fanless, Rugged, Extended Temperature



## Features

- Quad Core Intel® Atom™ E3845 1.91GHz Processor
- Rugged, -25°C to 70°C Operating Temperature
- Fanless, Slim and Compact Design
- Dual Display : VGA/ dual HDMI/ LVDS
- 4 Independent Gigabit LAN
- 6 External COM with 2 Isolated RS-232/ 422/ 485
- 3 USB 3.0, 2 USB 2.0, 8 External GPIO
- Supports 3G/ 4G/ LTE/ WiFi/ GPRS/ UMTS
- 9V to 28V DC Power Input
- Optional Onboard GPS



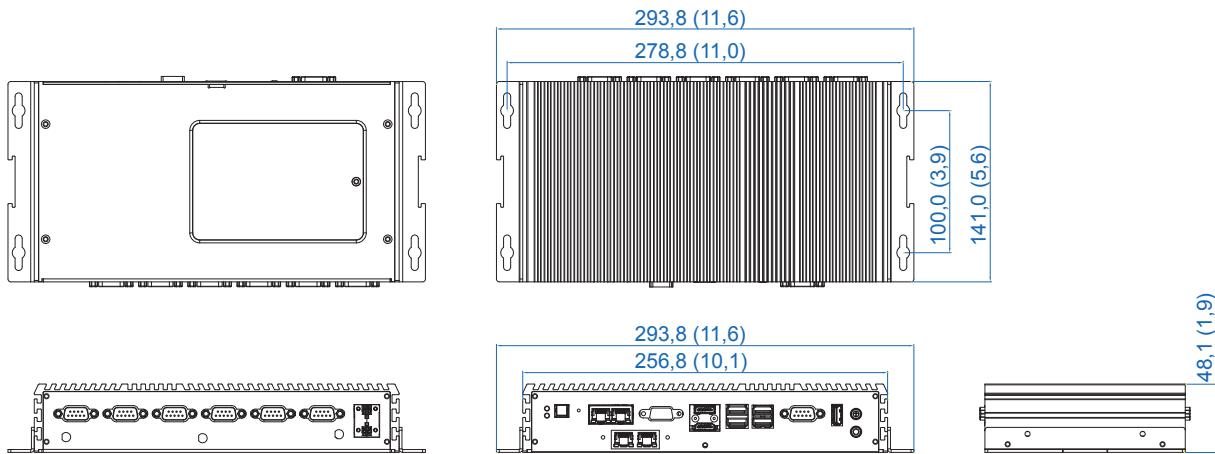
## Specifications

System	
<b>Processor</b>	Quad Core Intel® Atom™ E3845 1.91GHz Processor (Valleyview)
<b>Chipset</b>	Intel® SoC (Bay Trail)
<b>BIOS</b>	AMI
<b>SIO</b>	IT8786E
<b>Memory</b>	1 DDR3L 1333MHz SO-DIMM, up to 8GB
I/O Interface	
<b>Serial</b>	6 External COM : <ul style="list-style-type: none"> <li>▪ 2 COM RS-232/ 422/ 485</li> <li>▪ 2 COM RS-232</li> <li>▪ 2 Isolated COM RS-232/ 422/ 485</li> </ul>
<b>USB</b>	<ul style="list-style-type: none"> <li>▪ 3 USB 3.0 (External)</li> <li>▪ 2 USB 2.0 (External)</li> </ul>
<b>GPIO</b>	8 (External)
<b>LED</b>	Power, HDD
<b>SIM Card</b>	1 SIM Card Socket (Internal)
Expansion	
<b>Mini PCIe</b>	2 Mini PCIe Socket : <ul style="list-style-type: none"> <li>▪ 1 Mini PCIe for PCIe/ USB/ SIM Card</li> <li>▪ 1 Mini PCIe for mSATA</li> </ul>
Graphics	
<b>Graphics Processor</b>	Intel® HD
<b>Interface</b>	Dual Display : <ul style="list-style-type: none"> <li>▪ VGA : Up to 2560 x 1600</li> <li>▪ HDMI 1 : Up to 1920 x 1080</li> <li>▪ HDMI 2 : Up to 1920 x 1080</li> <li>▪ LVDS : Dual channel 24-bit (Optional)</li> </ul>
Storage	
<b>SATA</b>	1 SATA II (3Gbps)
<b>mSATA</b>	1 SATA II (Mini PCIe Type, 3Gbps)
<b>Storage Device</b>	1 2.5" SSD/ HDD Bracket (Internal)
Audio	
<b>Audio Codec</b>	Realtek ALC892, 5.1 Channel HD Audio
<b>Audio Interface</b>	1 Mic-in, 1 Line-out

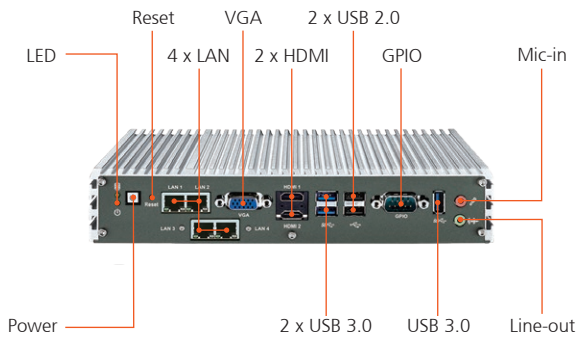
Ethernet	
<b>LAN 1</b>	Gigabit LAN by Intel® 82574L
<b>LAN 2</b>	Gigabit LAN by Intel® 82574L
<b>LAN 3</b>	Gigabit LAN by Intel® 82583V
<b>LAN 4</b>	Gigabit LAN by Intel® 82583V
Power	
<b>Power Input</b>	9V to 28V, DC-in
<b>Power Interface</b>	2-pin Terminal Block : V+, V-
<b>Remote Switch</b>	2-pin Terminal Block : On, Off
Others	
<b>Watchdog Timer</b>	Reset : 1 to 255 sec./min. per step
<b>Smart Management</b>	Wake on LAN, PXE supported
<b>HW Monitor</b>	Monitoring temperature, voltages. Auto throttling control when CPU overheats.
<b>GPS</b>	Onboard GPS Module (Optional)
Software Support	
<b>OS</b>	Windows 8, Windows 7, Linux
Mechanical	
<b>Dimensions (W x L x H)</b>	257mm x 141mm x 48mm (10.1" x 5.6" x 1.9")
<b>Weight</b>	2.1 kg (4.6 lb)
<b>Mounting</b>	Wallmount by mounting bracket
Environment	
<b>Operating Temperature</b>	-25°C to 70°C (-13°F to 158°F)
<b>Storage Temperature</b>	-40°C to 85°C (-40°F to 185°F)
<b>Humidity</b>	10% to 95% Humidity, non-condensing
<b>Relative Humidity</b>	95% @ 70°C
<b>Shock</b>	<ul style="list-style-type: none"> <li>▪ IEC 60068-2-27</li> <li>▪ SSD : 50G @ wallmount, Half-sine, 11ms</li> </ul>
<b>Vibration</b>	<ul style="list-style-type: none"> <li>▪ IEC 60068-2-64</li> <li>▪ SSD : 5Grms, 5Hz to 500Hz, 3 Axis</li> </ul>
<b>EMC</b>	CE, FCC, EN 50155, EN 50121-3-2

## Dimensions

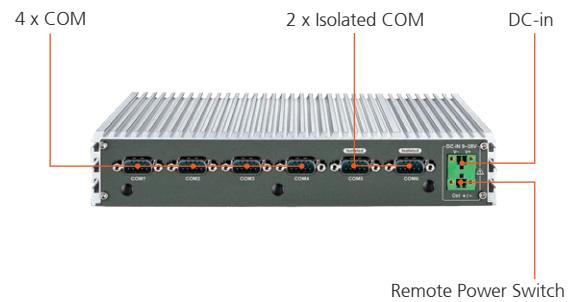
Unit : mm/ inch



## Front I/O



## Rear I/O



## Order Information

<b>ABP-2845A</b>	ABP-2000 Slim Embedded System, 4 GbE LAN, 6 COM w/ 2 Isolated, 5 USB, 8 GPIO, Onboard Quad Core Intel® Atom™ E3845
<b>M340L-W28M1</b>	Vecow DDR3L 4GB 1333/1066 MHz RAM, Wide Temperature -40°C to +85°C
<b>DDR3L4G</b>	Certified DDR3L-1600 4G RAM
<b>DDR3L8G</b>	Certified DDR3L-1600 8G RAM
<b>PWA-60WP2</b>	60W, 24V/2.5A 100V AC to 240V AC Power Adapter for 2-pin 3.5mm Terminal Block
<b>VESA Mount</b>	VESA Mounting Kit
<b>DIN-RAIL</b>	DIN Rail Kit
<b>3G Module</b>	Mini PCIe 3G/GPS Module with Antenna
<b>4G Module</b>	Mini PCIe 4G/GPS Module with Antenna
<b>WiFi &amp; Bluetooth Module</b>	Intel® Mini PCIe WiFi & Bluetooth Module with Antenna

1

High Performance Embedded System

2

Expandable Embedded System

3

Ultra Compact Embedded System

4

Multi-Touch Computer/ Display

5

Frame Grabber