

# ABP-2845A/ 2845/ 2045A/ 2045/ 2015

Slim Embedded System with Quad Core Intel® Atom™ E3845, 4 GigE 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 GigE 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



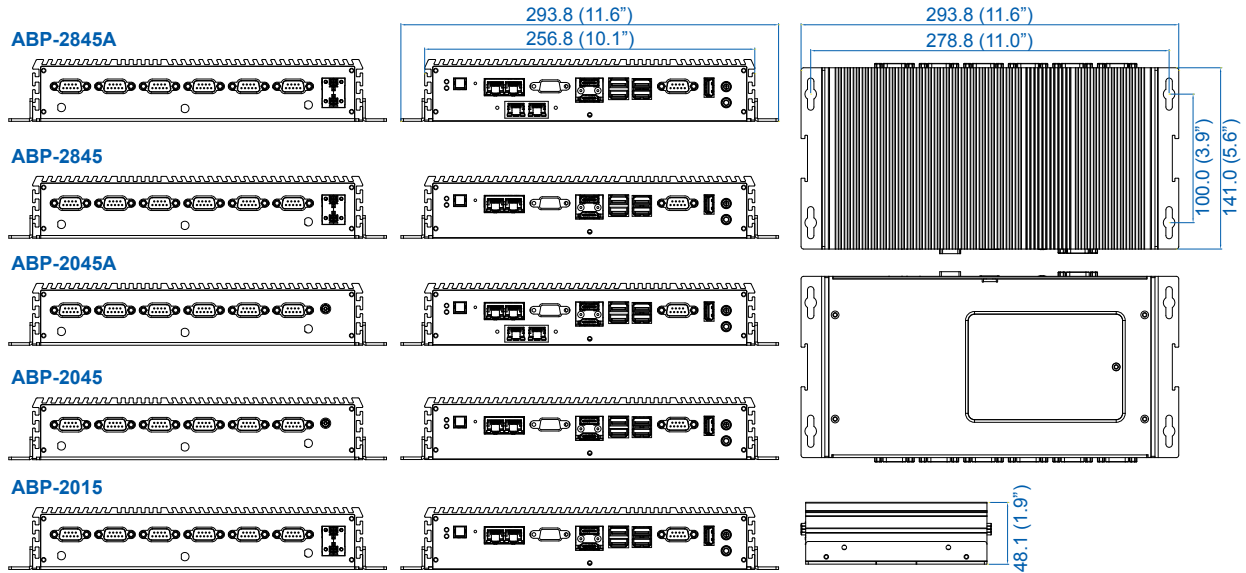
## Specifications

System	
Processor	Quad Core Intel® Atom™ E3845 1.91GHz/ E3815 1.46GHz Processor (Valleyview)
Chipset	Intel® SoC (Bay Trail)
BIOS	AMI
SIO	IT8786E
Memory	1 DDR3L 1333MHz SO-DIMM, up to 8GB
I/O Interface	
Serial	ABP-2845A, ABP-2845 : 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> ABP-2045A, ABP-2045, ABP-2015 : 6 External COM : <ul style="list-style-type: none"> <li>▪ 4 COM RS-232/ 422/ 485</li> <li>▪ 2 COM RS-232</li> </ul>
USB	<ul style="list-style-type: none"> <li>▪ 3 USB 3.0 (External)</li> <li>▪ 2 USB 2.0 (External)</li> </ul>
GPIO	8 (External)
LED	Power, HDD
SIM Card	1 SIM Card Socket (Internal)
Expansion	
Mini PCIe	ABP-2845, ABP-2045, ABP-2015 : 3 Mini PCIe Socket : <ul style="list-style-type: none"> <li>▪ 1 Mini PCIe for PCIe/ USB/ SIM Card</li> <li>▪ 1 Mini PCIe for PCIe/ USB</li> <li>▪ 1 Mini PCIe for mSATA</li> </ul> ABP-2845A, ABP-2045A : 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	
Graphics Processor	Intel® HD
Interface	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	
SATA	1 SATA II (3Gbps)
mSATA	1 SATA II (Mini PCIe Type, 3Gbps)
Storage Device	1 2.5" SSD/ HDD Bracket (Internal)
Audio	
Audio Codec	Realtek ALC892, 5.1 Channel HD Audio
Audio Interface	1 Mic-in, 1 Line-out

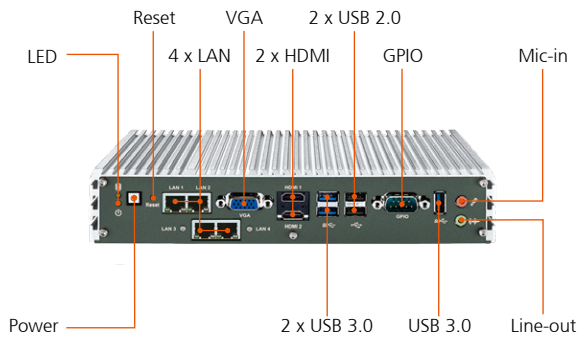
Ethernet	
LAN 1	GigE LAN by Intel® 82574L
LAN 2	GigE LAN by Intel® 82574L
LAN 3	ABP-2845A, ABP-2045A : GigE LAN by Intel® I210 ABP-2845, ABP-2045, ABP-2015 : NA
LAN 4	ABP-2845A, ABP-2045A : GigE LAN by Intel® I210 ABP-2845, ABP-2045, ABP-2015 : NA
Power	
Power Input	9V to 28V, DC-in
Power Interface	ABP-2845A, ABP-2845, ABP-2015 : 2-pin Terminal Block : V+, V ABP-2045A, ABP-2045 : 1 DC Jack
Remote Switch	ABP-2845A, ABP-2845, ABP-2015 : 2-pin Terminal Block : On, Off ABP-2045A, ABP-2045 : NA
Others	
Watchdog Timer	Reset : 1 to 255 sec./min. per step
Smart Management	Wake on LAN, PXE supported
HW Monitor	Monitoring temperature, voltages. Auto throttling control when CPU overheats.
GPS	Onboard GPS Module (Optional)
Software Support	
OS	Windows 8.1, Windows 7, Linux
Mechanical	
Dimensions (W x L x H)	257mm x 141mm x 48mm (10.1" x 5.6" x 1.9")
Weight	2.1 kg (4.6 lb)
Mounting	<ul style="list-style-type: none"> <li>▪ Wallmount by mounting bracket</li> <li>▪ Din Rail Mount (Optional)</li> </ul>
Environment	
Operating Temperature	-25°C to 70°C (-13°F to 158°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Humidity	10% to 95% Humidity, non-condensing
Relative Humidity	95% @ 70°C
Shock	<ul style="list-style-type: none"> <li>▪ IEC 60068-2-27</li> <li>▪ SSD : 50G @ wallmount, Half-sine, 11ms</li> </ul>
Vibration	<ul style="list-style-type: none"> <li>▪ IEC 60068-2-64</li> <li>▪ SSD : 5Grms, 5Hz to 500Hz, 3 Axis</li> </ul>
Certification	CE, FCC, EN50155, EN50121-3-2

# Dimensions

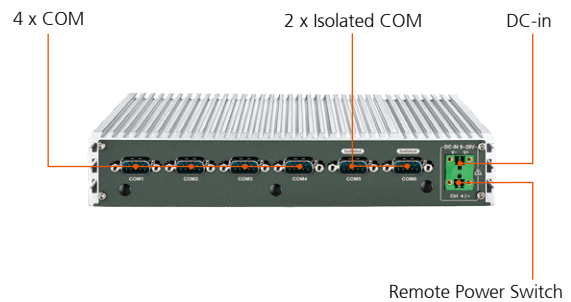
Unit : mm/ inch



## Front I/O (ABP-2845A)



## Rear I/O



# Order Information

<b>ABP-2845A</b>	ABP-2000, 4 GigE LAN, 6 COM w/ 2 Isolated, 5 USB, 8 GPIO, Onboard Quad Core Intel® Atom™ E3845
<b>ABP-2845</b>	ABP-2000, 2 GigE LAN, 6 COM w/ 2 Isolated, 5 USB, 8 GPIO, Onboard Quad Core Intel® Atom™ E3845
<b>ABP-2045A</b>	ABP-2000, 4 GigE LAN, 6 COM, 5 USB, 8 GPIO, Onboard Quad Core Intel® Atom™ E3845
<b>ABP-2045</b>	ABP-2000, 2 GigE LAN, 6 COM, 5 USB, 8 GPIO, Onboard Quad Core Intel® Atom™ E3845
<b>ABP-2015</b>	ABP-2000, 2 GigE LAN, 6 COM, 5 USB, 8 GPIO, Onboard Intel® Atom™ E3815
<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>PWA-60W</b>	60W, 12V/5A 100V AC to 240V AC Power Adapter for DC-Jack
<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