



## FEATURES

- Intel Atom® Processor E3800 Series (Formerly Bay Trail)
- On Board DDR3L SDRAM up to 4GB, On Board SSD up to 64GB
- Low Power Consumption (3 to 10W)
- Supports Wide Operating Temperature and Wide Voltage
- Supports VGA, LVDS, DP, eDP and USB 3.0



PCOM-BA00, a Type 10 Mini COM Express® (84 x 55 mm) module with Intel Atom® E3800 series SoC supports PCI Express, dual display, NANDrive storage, USB 3.0/2.0, serial ports and SATA devices. This module passed all Portwell's industrial evaluation testing. By low power consumption, wide-temp support, better computing, and cost effective, Portwell promotes PCOM-BA00 with confidence as vertical solution to aim at versatile applications, such as Automation, Military, Networking, Transportation, and so on.

## General

Product	PCOM-BA00				
Form Factor	Type 10, Mini Form Factor COM-Express® (84 x 55 mm)				
Processor	Intel Atom®				
	E3845	E3827	E3825	E3815	E3805
Core	4	2	2	1	2
Freq.	1.91 GHz	1.75 GHz	1.33 GHz	1.46 GHz	1.33 GHz
Turbo	N/A				
Cache	2MB	1MB	1MB	512KB	1MB
Processor Graphics	Intel® HD Graphics for Intel Atom® Processor Z3700 Series, not include E3805				N/A
Graphics Base Frequency	542 MHz	542 MHz	533 MHz	400 MHz	533 MHz
Graphics Max Dynamic Frequency	792 MHz	792 MHz	533 MHz	400 MHz	533 MHz
HW Encoding	H.264 and MPEG2				
HW Decoding	H.264, MPEG2, MVC, VC-1, WMV9, JPEG/MKPEG, VP8				
HW Acceleration	Direct 11, OCL 1.2, OGL ES Halmi/2.0/1.1, OGL 3.2				
Processor TDP	10W	8W	6W	5W	3W
BIOS	AMI BIOS				
ECC Memory Supported	YES				
Memory	On board DDR3L SDRAM up to 4GB 1333 MT/s				

## I/O Interface

SATA	2x SATA II		
USB	1 x USB 3.0 4 x USB 2.0		
Ethernet	Intel® Ethernet Controller I210IT		
Serial I/O	GPIO	8 x GPIO	
	I <sup>2</sup> C	Baud rate: 400KHz	
	SMBus	Baud rate: 100KHz	
	UART	2 Serial Port (Tx/Rx)	
PEG	N/A		
PCI Express	3 x PCIe 2.0 x 1 (Optional 4 x PCIe 2.0 x 1)		
Display	Default	Options	Resolution
		DP	up to 2560x 1600 @ 60Hz
	eDP	VGA	up to 2560x 1600 @ 60Hz
		HDMI	up to 1920x 1080 @ 60Hz
Security	Default	eDP	up to 2560x 1600 @ 60Hz
		LVDS (24bit, dual channel)	up to 2560x 1600 @ 60Hz
		Options	Resolution
		Intel® AES	

## MECHANICAL & ENVIRONMENT

Dimension	84 x 55mm
Power DC IN	+4.75VDC to +20VDC, AT/ATX Mode
Storage Temperature	-40°C to 80°C
Operation Temperature	-40°C to 80°C
Certification	Contact us
MTBF	Over 120,000 hours at 40°C
Vibration	Contact us
OS	Windows 7, WES7/8, Embedded Compact7 Linux Fedora/Tizen/Yocto RTOS Windriver

## ORDERING GUIDE

Product	Ordering P/N	Status
PCOM-BA00-E3805-2G	AB1-3C19	Available
PCOM-BA00-E3815-2G	AB1-3B49	Available
PCOM-BA00-E3825-2G	AB1-3B47	Available
PCOM-BA00-E3827-2G	AB1-3B50	Available
PCOM-BA00-E3845-2G	AB1-3B51	Available
PCOM-BA00-E3845-4G	AB1-3B48	Available

Accessory	Ordering P/N	Status
PCOM-CA00 (Carrier Board)	AB1-3917	Available

## BLOCK DIAGRAM

### PCOM-BA00

