



# PCOM-B631VG

Type VI Compact COM Express module based on Intel® 4th generation Core ULT processor with DDR3L SDRAM, Triple Displays, SATA, and USB3.0/2.0



PCOM-B631VG can provide good computing by Dual Core processor with lower power consumption comparing with Haswell 2-chip platform. Multi-display support, such as LVDS/eDP/DP/VGA, is convenient to meet customer's display output requirement.

SATA channels, PCI Express x4, x2 and x1, offer customer options for data transfer and expansion device support. In addition, grounding design is efficient on EMC protection as the advantage for applications like Military, Automation, and Outdoor systems.

Moreover, wide-temp components, except ULT SoC, are used on PCOM-B631VG for applications with wide-temp range of -40°C to 85°C.

## GENERAL

Processor	- Intel® Core™ Haswell (ULT) with DC SKUs Processor - 3MB~4MB Shared Last Level Cache - SMT: 2 threads/core
BIOS	- Phoenix BIOS
Memory	- Support up to 16GB DDR3L 1333/1600 SDRAM on one 204pin SO-DIMM
Storage Devices	- Two SATA 2.0
Watchdog Timer	- Programmable by embedded controller
Expansion Interface	- Supports up to four PCI Express x1 lanes and one x4 lane - SPI Interface - SM Bus interface - UART interface - I2C interface

## FEATURES

- Intel® Haswell ULT processor offers good computing with low power consumption
- Supports DDR3L-1333/1600
- Supports multi display
- Grounding design helps on EMC protection

## ORDERING GUIDE

AB1-3A46	PCOM-B631VG with Intel Core i7 4650U CPU
AB1-3A43	PCOM-B631VG with Intel Core i5 4300U CPU
AB1-3A40	PCOM-B631VG with Intel Core i3 4010U CPU
AB1-3A29	PCOM-B631VG with Intel Core i5 2980U CPU

## I/O INTERFACE

Audio	- HDA controller integrated in SoC
Ethernet	- Onboard Intel I218LM
Serial Port	- Two series RX/TX supported from onboard EC (embedded controller)
USB	- 8 ports USB2.0 - 1 port USB3.0
Keyboard & Mouse	- KBC controller integrated in embedded controller
GPIO	- 8bit configurable controlled by embedded controller

## DISPLAY

Display Interface	- VGA: resolution up to 2560x1536@24bpp - Up to two 24 bit LVDS/eDP resolution up to 1920 x 1200 @60Hz
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## PACKING LIST

One PCOM-B631VG COM-Express module
One Driver CD



### American Portwell

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## Mechanical & Environment

Dimension	- 95mm(L) x 95mm(W) x 2.0mm(H)
Power Supply	- DC 8V~18V
Environment	- Operation temperature: -0~60°C - Storage temperature: -20~80°C - Relative humidity : 5~95%, non-condensing



Last updated: May 27, 2016