

# PCOM- B21A

Developments with height and size constraints require integrated processors with the flexibility of upgradable options such as with hand held mobile devices, industrial thin clients, industrial switches, small file/firewall servers, spam prevention and virus protection intelligence systems.



## Intel® Cedarview based Type 10 Mini-COM Express module with the PICMG COM.0 R2.1 specification

The new Cedar Trail on Mini-Com-Express® is the size of a business card (84mm x 55mm). Its compact size multi-core processor N2600/N2800 +NM10 provides rich I/O and expansions such as PCI-E, LAN, USB and multi-display features.



Portwell PCOM-B21A series are designed with Intel® N2600 / N2800 +NM10 with less than 12W low power consumption and cost effective dual core solution. This product features a fan-less system capable of withstanding -40 to 80 degree Celsius making it suitable for military and aerospace communications and the environments in which they operate.

## FEATURES

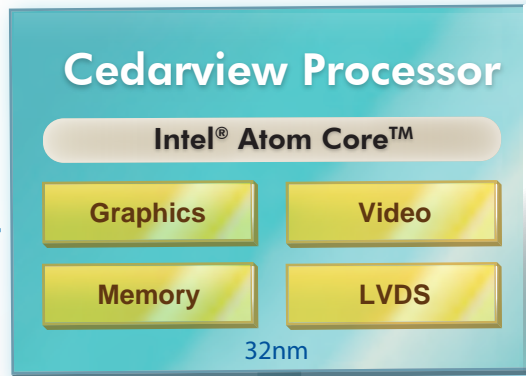
- The Intel® Atom™ N2600/N2800 embedded processor and NM10 platform that provides cost effective solutions with low power and dual core processor technology
- Supports four PCI Express lanes, four x1 lanes can be configured to one x4 lane
- Supports one DDR3 1067MT/s SDRAM, UP to 2GB(N2600)/ 4GB(N2800)
- Supports eight USB2.0
- Supports dual independent displays of HDMI and DP

## ORDERING GUIDE

AB1-3875	(R).PCOM-B21A-N2800-2G. TYPE 10, Mini COM-Express
AB1-3A39	(R).PCOM-B21A-N2600-1G. TYPE 10, Mini COM-Express
AB1-3A38	(R).PCOM-B21A-N2800-1G. TYPE 10, Mini COM-Express
AB1-3956	(R).PCOM-B21A-N2600-I-1G. TYPE 10, Mini COM-Express



DDR3 Memory Down  
\*1 Channel  
\*1 DIMM



x2 DMI for Cedarview-M



Embedded Controller

SPI

HDA

A/B



LVDS/ eDP x2



DP/HDMI



3 PCI Express x1



8 ports



2 SATA

Codec



HD Audio

PCIe x1



LAN 82583V

### Processor Core

- ◆ Cedarview Core™ (32nm)  
N2800, N2600 Dual Core SKUs
- ◆ 1MB, Shared Last Level Cache
- ◆ SMT: 4 threads/core
- ◆ Turbo Mode

### Highlights

- ◆ Wide range 4.75V~20V DC input support
- ◆ Onboard nano SSD, up to 32GB
- ◆ Integrated Native PCI-E Gen 1 supports 1x4, 4x1 configurations

### Memory

- ◆ DDR3-1067 MT/s
- ◆ 1 Memory Channel
- ◆ 6.4GB/s Peak Memory Bandwidth

### Platform Thermal Design Power

CPU

N2800

N2600

6.5W

3.5W

PCH

NM10  
2.1W

NM10  
2.1W

Watt

8.6W

5.6W