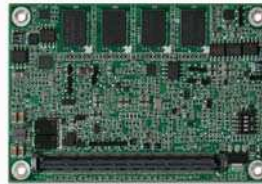# PCOM- B21A

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 Trial on Nano-Com-Express is the size of a business card (84mm x 55mm). Its compact size the multi-core processor N2600/ N2800 +NM10 provides rich I/O and expansions such as PCI-E, LAN, USB and multi-display features.
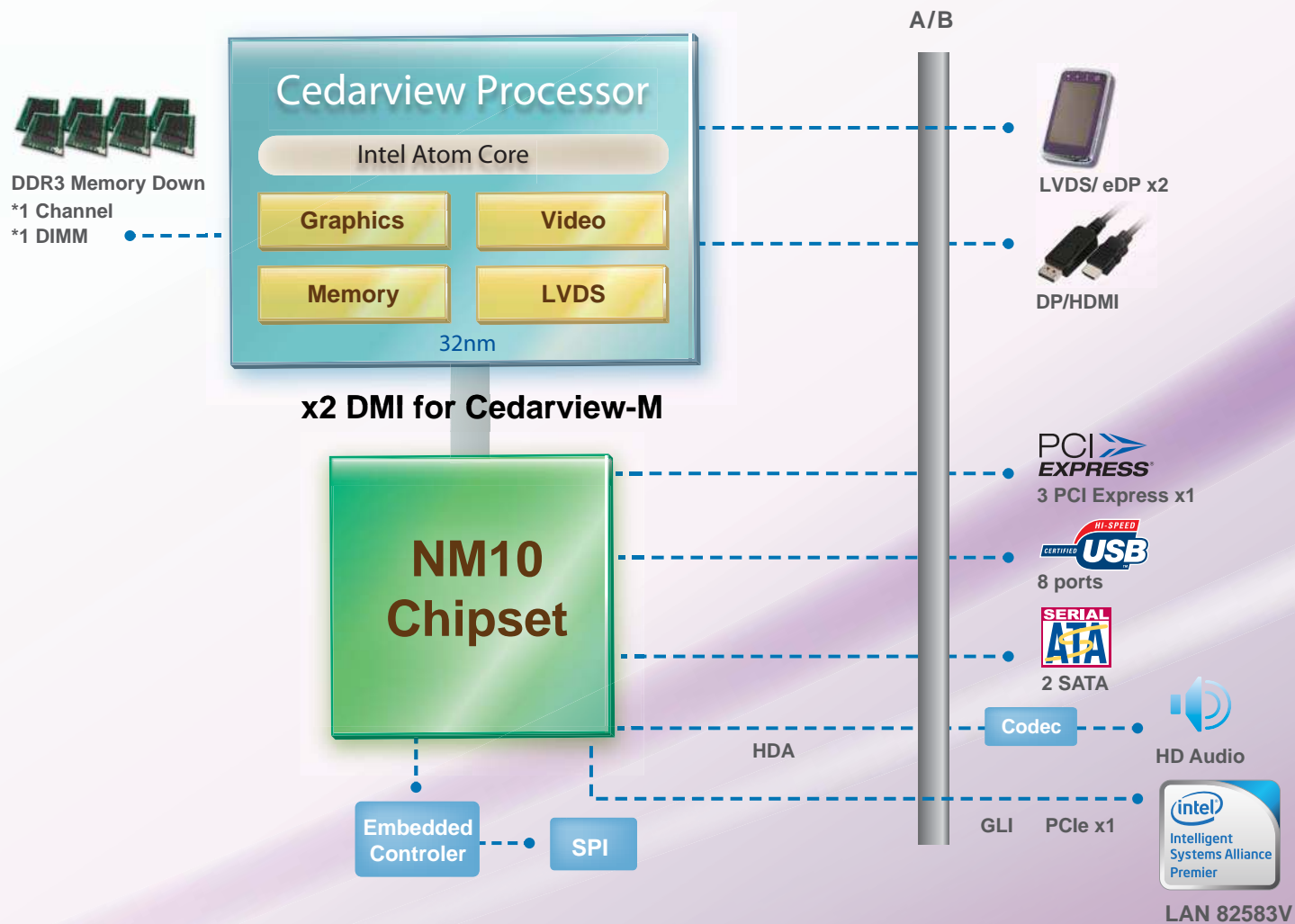
Portwell PCOM-B218VG series are designed with Intel® N2600 / N2800 +NM10 with less than 12W low power consumption and cost effective dual core solution. This product features a fan-less system capable of withstanding -40 to 80 degree Celsius making it suitable for military and aerospace communications 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 x 1 lanes can be configured to one x 4 lane
■ Supports one DDR3 1067MT/s SDRAM, UP to 2GB
■ Supports eight USB2.0
■ Supports dual independent displays of LVDS and DP

ORDERING GUIDE

AB1-3874	(R).PCOM-B21A-N2600. TYPE 10, Mini COM-Express
AB1-3875	(R).PCOM-B21A-N2800. TYPE 10, Mini COM-Express

Portwell

M.I.T

PCOM

PQ7

PC/104

Compliance

A/B

Cedarview Processor

Intel Atom Core

Graphics	Video
Memory	LVDS

32nm

DDR3 Memory Down
*1 Channel
*1 DIMM

LVDS/ eDP x2

DP/HDMI

x2 DMI for Cedarview-M

NM10 Chipset

PCI EXPRESS®
3 PCI Express x1

HI-SPEED USB CERTIFIED
8 ports

SERIAL ATA
2 SATA

Codec

HD Audio

HDA

Embedded Controler

SPI

GLI   PCIe x1

intel
Intelligent Systems Alliance Premier

LAN 82583V

Processor Core

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

Highlights

◆ Integrated Memory Controller:1 Channel of Native DDR3 support
◆ Integrated Native PCI-E Gen 1 supports 1x4, 4x1 configurations

Memory

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

Platform Thermal Design Power

	N2800	N2600
	6.5W	3.5W
	NM10 2.1W	NM10 2.1W
Watt	8.6W	5.6W