PCOM-B632VG

Implementation of applications used for national security and cyber warfare require high intelligence systems capable of operating in remote conditions and under stringent conditions, more so than industrial computers.

Intel® ATOM E3800 series based Type VI COM Express module with DDR3L SDRAM, VGA, eDP, HDMI, Gigabit Ethernet and 3Gbps SATA.

PCOM-B632VG is designed to offer good EMC protection by latest mobile platform, SoC(System-On-Chip) integrated remote technology and embedded controller. Also PCOM-B632VG provides high performance for various display, eDP and HDMI.
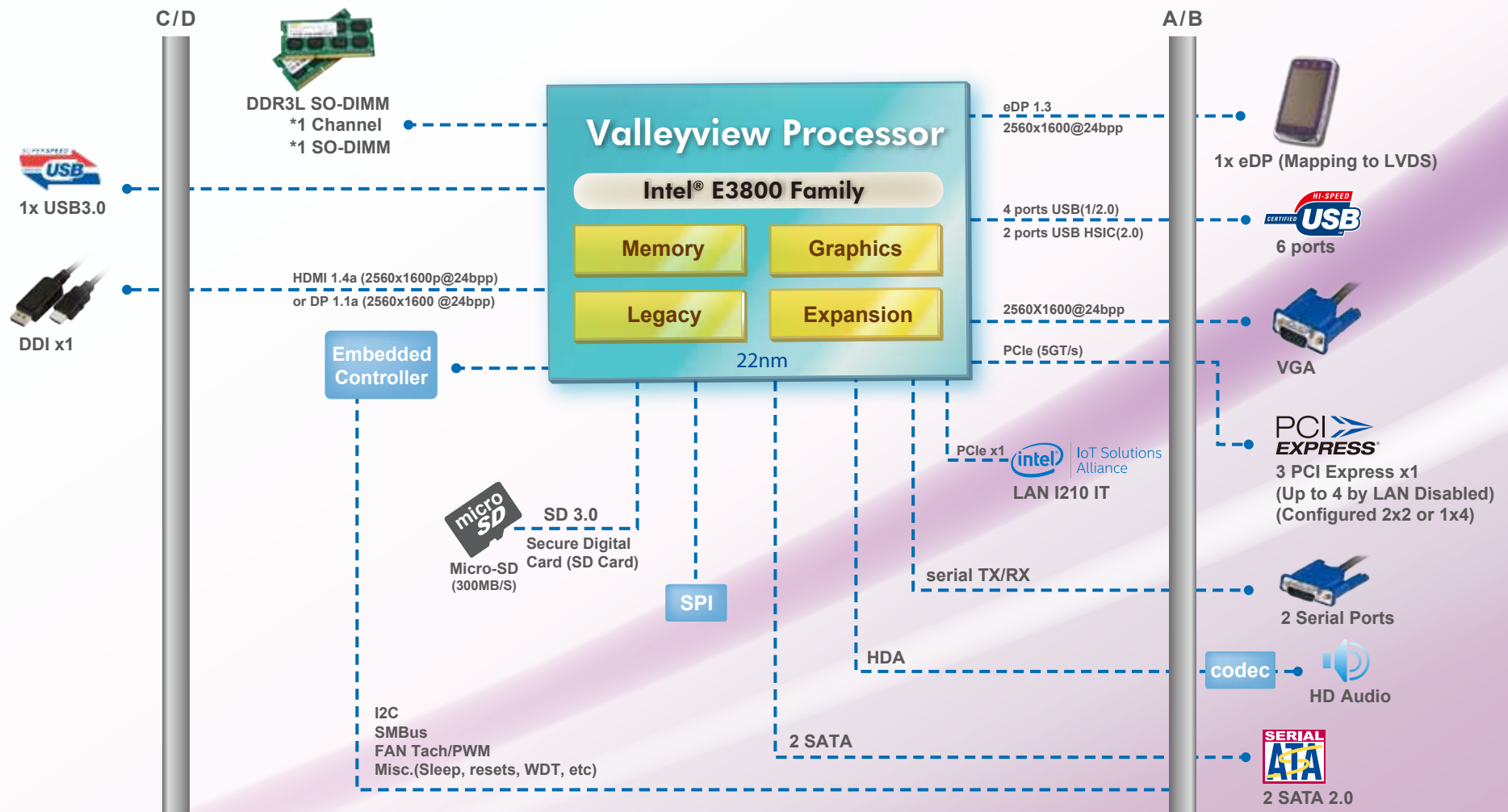

The PCOM-B632VG COM Express module has been enhanced by Portwell in response to market demand for an even lower power platform to take advantage of the Intel® Atom™ processor's already compact design. In fact, since its initial inception, Portwell's expanding Intel Atom processor-based COM Express product portfolio has now grown to include industrial temperature range support. Portwell's versatile COM Express modules adapt to these changes by enabling designers to partition commodity host-processors from proprietary baseboards, thereby minimizing current and future design risks during the initial phase of development.

FEATURES

- Latest Intel® Valleyview embedded processor provides cost effective solutions with low power and quad core processor technology
- Supports up to four PCIe lanes, four x 1 lanes can be configured to one x 4 lane
- Supports one DDR3L 1066/1333MT/s SDRAM, up to 4GB
- Supports one USB3.0

ORDERING GUIDE

AB1-3A35	PCOM-B632-E3825, ATOM E3825 Dual Core with MOQ
AB1-3A34	PCOM-B632-E3826, ATOM E3826 Dual Core with MOQ
AB1-3A33	PCOM-B632-E3827, ATOM E3827 Dual Core
AB1-3A36	PCOM-B632-E3845, ATOM E3845 QUAD Core
AB1-3A40	PCOM-B632-E3815, ATOM E3845 Uni Core

C / D

A / B

DDR3L SO-DIMM
*1 Channel
*1 SO-DIMM

Valleyview Processor

Intel® E3800 Family

| Memory | Graphics |
| Legacy | Expansion |

22nm

eDP 1.3
2560x1600@24bpp

1x eDP (Mapping to LVDS)

1x USB3.0

4 ports USB(1/2.0)
2 ports USB HSIC(2.0)

6 ports

HDMI 1.4a (2560x1600p@24bpp)
or DP 1.1a (2560x1600 @24bpp)

2560X1600@24bpp

VGA

DDI x1

PCIe (5GT/s)

Embedded Controller

PCIe x1

intel IoT Solutions Alliance

LAN I210 IT

PCI EXPRESS®

**3 PCI Express x1
(Up to 4 by LAN Disabled)
(Configured 2x2 or 1x4)**

micro SD

SD 3.0

Secure Digital
Card (SD Card)

**Micro-SD
(300MB/S)**

SPI

serial TX/RX

2 Serial Ports

HDA

codec

HD Audio

I2C
SMBus
FAN Tach/PWM
Misc.(Sleep, resets, WDT, etc)

2 SATA

SERIAL ATA

2 SATA 2.0

Processor Core

◆ BayTrail-I Core™ (22nm) E3845, E3827, E3826 and E3825 for multi-core; E3815 for Uni-core SKUs

◆ Up to 2M, Shared Last Level Cache

◆ SMT: 4 threads/core

Highlights

◆ Integrated micro-SD on module

◆ Integrated PET (Portwell Engineering Toolkit) GUI

◆ One USB3.0 port support

◆ Up to 4x PCI-Express x1 which support 1x4, 4x1 configurations

Memory

◆ DDR3L-1067/1333MT/s

◆ 1 Memory Channel

◆ Up to 17GB/s for Industry SKU

Platform Thermal Design Power

CPU

| E3845 4C 1.9GHz | E3827 2C 1.75GHz | E3815 1C 1.46GHz |

Watt

| 10W | 8W | 5W |