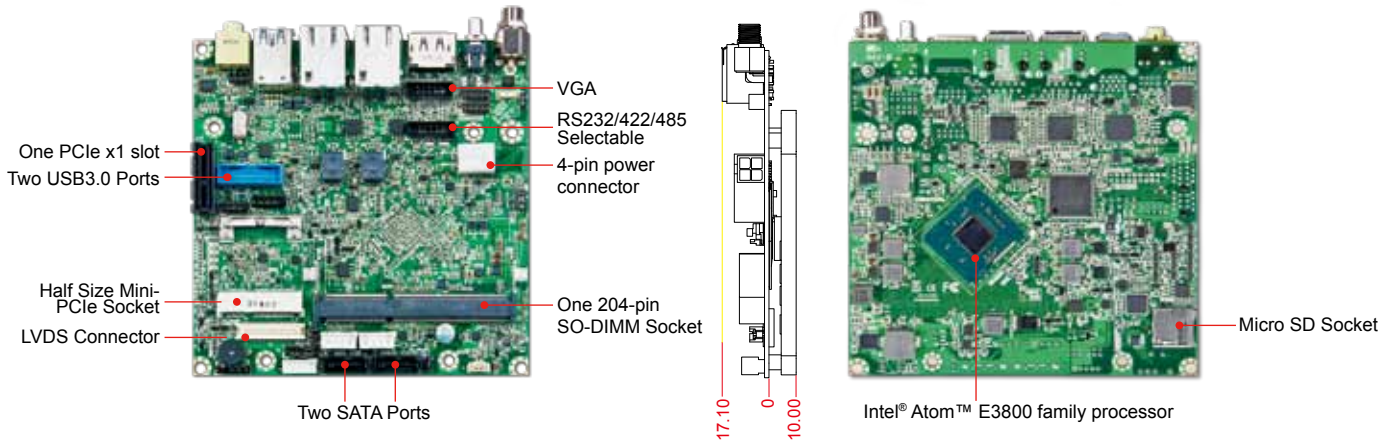


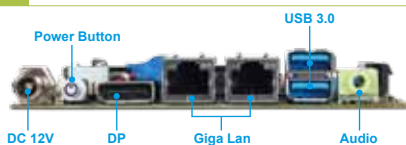
# NANO-6060

Intel® Atom™ E3800 family SoC based NANO-ITX. Board with dual display, Gigabit Ethernet, Audio, USB 3.0, micro SD and SATA



NANO-6060, built with Intel® Atom™ processor E3800 family that not only outputs under 10W for fanless applications, but also supports a wide industrial temperature from -40°C to 85°C, delivers superior up to quad-core processing power and high capability. Portwell has taken advantage of such technology to furnish a series of products that can meet multiple industrial requirements such as fanless, cost-effective of CPU performance, and compact systems.

## REAR I/O



## FEATURES

- Intel® Valleyview-I SoC based platform
- One 204-pin SODIMM supports DDR3L up to 8GB
- Multiple display by VGA, DP, dual channel 24 bit LVDS
- Supports two SATA 2.0 ports, one micro SD socket, and four USB 3.0 ports
- One half size Mini-PCIe socket and PCIe x1 slot for expansion
- Supports DC 12V input

## ORDERING GUIDE

|          |  |
|----------|--|
| AB1-3A45 | (R).NANO-6060- E3815. Nano-ITX ESB. Intel ATOM E3815 1.46GHz Single Core.w/DDR3L SDRAM/VGA/24bit LVDS/DP/single GbE LAN/micro SD |
| AB1-3A46 | (R).NANO-6060- E3827. Nano-ITX ESB. Intel ATOM E3827 1.75GHz Dual Core.w/DDR3L SDRAM/VGA/24bit LVDS/DP/dual GbE LAN/micro SD     |
| AB1-3A47 | (R).NANO-6060- E3845. Nano-ITX ESB. Intel ATOM E3845 1.91GHz Quad Core.w/DDR3L SDRAM/VGA/24bit LVDS/DP/dual GbE LAN/micro SD     |

## PACKING LIST

|                                   |
|-----------------------------------|
| One NANO-6060 NANO-ITX Main Board |
| One passive Heatsink              |
| One Installation CD               |

## GENERAL

|                     |  |
|---------------------|--|
| Processor           | - Intel® Atom™ E3800 family processor<br>- Cache up to 2MB (for Quad Core)<br>- DPM (Defect Per Million devices) <50<br>- Support Intel® VT-x technology |
| BIOS                | - Phoenix EFI BIOS   |
| Memory              | - Support up to 8GB DDR3L 1066/1333 SDRAM on one 204pin SO-DIMM  |
| Storage Devices     | - Two SATA 2.0<br>- One Micro-SD socket  |
| Watchdog Timer      | - Programmable by embedded controller  |
| Hardware Monitoring | - Temperature (CPU & System)<br>- Voltage (CPU Vcore, 12V, 5V, 3.3V, 1.35V)  |
| Expansion Interface | - 1x PCI Expressx1 slot<br>- 1x half size Mini-PCIe slot   |

## I/O INTERFACE

|             |   |
|-------------|---|
| Audio       | - HDA controller integrated in Intel® SoC<br>- Realtek ALC892 HDA codec, 5.1 channels Audio Jack on rear I/O with Line-out and on board pin header with Line-in, Line-out and Mic-in  |
| Ethernet    | - Dual Intel® I210IT Gigabit Ethernet controller (for E3827/ E3845 only)<br>- 2x RJ45 connectors on rear I/O (for E3827/ E3845 only)<br>- Single Intel® I210IT Gigabit Ethernet controller and 1xRJ45 connector on rear I/O for E3815 |
| Serial Port | - 1x RS232/422/485 on board connector (selected by bios)  |
| USB         | - 2x USB 3.0 ports on rear I/O<br>- 2x USB 2.0 and 2x USB 3.0 ports on board with pitch 2.0 header  |
| GPIO        | - 8bit configurable controlled by embedded controller   |

## DISPLAY

|                    |  |
|--------------------|--|
| Graphic Controller | - Intel® Gen 7 graphic engine supports DirectX 11, OpenGL 4.0<br>- Video decode hardware acceleration supports for H.264, MPEG2, MVC, VC-1, WMV9 and VP8 formats   |
| Display Interface  | - LVDS: Dual channel 24bit LVDS on board connector, resolution up to 1920x1200 @60Hz<br>- VGA: One on-board DB-15 connector, resolution up to 1920x1200 (WUXGA)<br>- DP: One DP port on rear I/O, resolution up to 2560x1600 |

## Mechanical & Environment

|              |   |
|--------------|---|
| Dimension    | - 120(L) x 120(W)mm; 4.72"(L) x 4.72"(W)  |
| Power Supply | - DC 12V input  |
| Environment  | - Operation temperature: -40~80°C<br>- Storage temperature: -40~80°C<br>- Relative humidity : 5~95%, non-condensing |
| MTBF         | - Over 100,000hrs at 55°C   |

