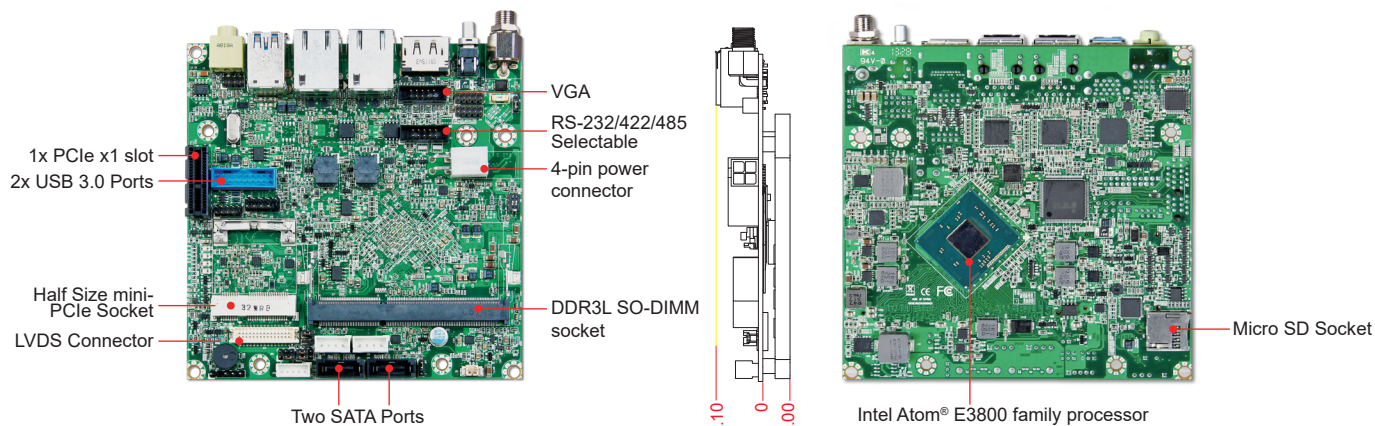


# NANO-6060

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

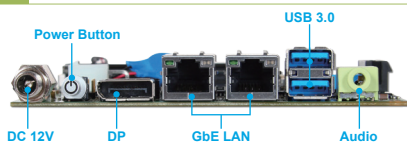


NANO-6060 build with Intel Atom® processor E3800 family that not only outputs under 10W for fan-less applications, but also supports a wide industrial temperature from -40°C to 85°C. With its superior up to Quad Core processing power and high capability. Portwell have taken advantage of such technology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

## FEATURES

- Intel® Bay Trail-I SoC based platform
- 1x 204-pin SO-DIMM supports DDR3L up to 4GB
- Multiple displays by VGA, DP, dual channel 24 bit LVDS
- Supports 2x SATA II ports, 1x micro SD socket, and 4x USB 3.0 ports
- 1x half size mini-PCIe socket and PCIe x1 slot for expansion
- Supports DC 12V input

## REAR I/O



## ORDERING GUIDE

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

## PACKING LIST

|                                   |
|-----------------------------------|
| One NANO-6060 NANO-ITX Main Board |
| One Passive Heat Spreader         |
| 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              | 1x DDR3L 1066/1333MT/s non-ECC SO-DIMM up to 4GB  |
| Storage Devices     | - 2x SATA II<br>- 1x 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 PCIe x1 slot<br>- 1x half size mini-PCIe slot  |

## I/O INTERFACE

|             |   |
|-------------|---|
| Audio       | - HDA controller integrated in Intel® SoC<br>- Realtek ALC892 HDA codec, Audio Jack on rear I/O with Line-out and on board pin header with Line-in, Line-out, and Mic-in  |
| Ethernet    | - 2x Dual Intel® I210IT Gigabit Ethernet controller (for E3827/ E3845 only)<br>- 2x RJ45 connectors on rear I/O (for E3827/ E3845 only)<br>- 1x Single Intel® I210IT Gigabit Ethernet controller and 1xRJ45 connector on rear I/O for E3815 |
| Serial Port | 1x RS-232/422/485 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® Gen7 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     | 120mm(L) x 120mm(W) ; 4.72"(L) x 4.72"(W)  |
| Power Supply  | DC 12V input   |
| Environment   | - Operation temperature: -40°C~85°C<br>- Storage temperature: -40°C~85°C<br>- Relative humidity : 5%~95%, non-condensing |
| Certification | CE,FCC Class B   |
| MTBF          | Over 100,000hrs at 55°C  |

