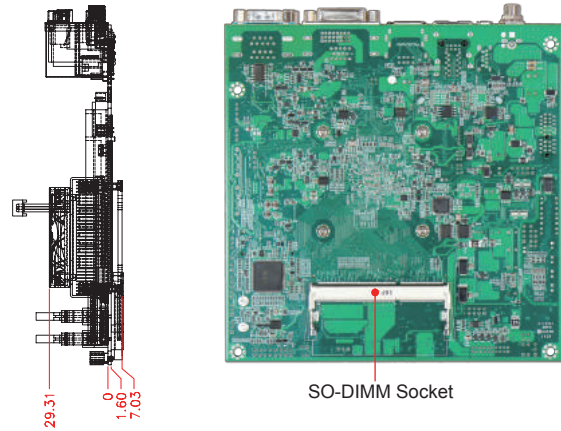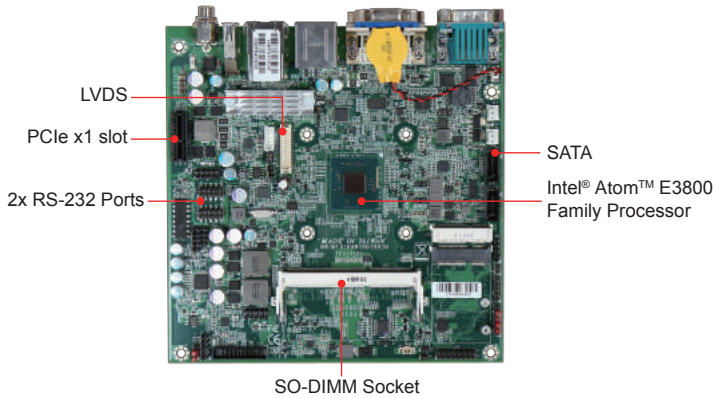# WADE-8079

Intel® Atom™ E3800 SoC based Mini-ITX Board with VGA, DP, DVI, LVDS, Gigabit Ethernet, Audio, USB 3.0, SATA and 2x mini-PCIe slot with mSATA interface

- LVDS
- PCIe x1 slot
- 2x RS-232 Ports
- SATA
- Intel® Atom™ E3800 Family Processor
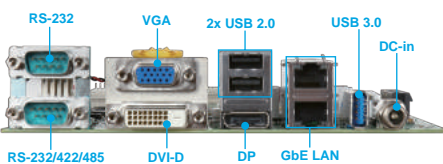- SO-DIMM Socket
- SO-DIMM Socket

WADE-8079 is based on Intel® Atom™ processor E3800 product family with memory and PCI Express controller integrated to support two-channel DDR3L memory and PCI Express 2.0 lanes. Portwell has taken advantage of such technology to furnish a series of products that meets multiple industrial requirements for cost effectiveness, reliable performance and a high level of data integrity and uptime.

FEATURES

- Latest Intel® Atom™ embedded processor Expansion Interface provides cost effective solutions with low power and quad core processor technology
- Support 2x DDR3L 1066/1333 MT/s SDRAM, up to 8GB (E3845/ E3826)
- Support 1x DDR3L 1066/1333 MT/s SDRAM, up to 4GB (E3815)
- Supports VGA/DVI/DP&LVDS (Via switch)
- 2x SATA II Ports (1x Switch mini-PCIe)
- Total 5x USB ports (1x USB 3.0 Ports & 4x USB 2.0 Ports)

REAR I/O

- RS-232
- VGA
- 2x USB 2.0
- USB 3.0
- DC-in
- RS-232/422/485
- DVI-D
- DP
- GbE LAN

ORDERING GUIDE

AB1-3B39	**(R).WADE-8079-E3845** Mini-ITX ESB.Intel Bay Trail(Vallyview-I E3845 QC 1.9GHz processor) on Board .w/DDR3L SO-DIMM/VGA/DVI/DP/Dual GbE Lan/COM/USB

PACKING LIST

One WADE-8079 motherboard
One Driver CD
One SATA cable

GENERAL

Processor	- Intel® Atom™ E3800 family processor - Cache up to 2MB (for Quad Core) - DPM (Defect Per Million devices) <50 - Support Intel® VT-x techology
Chipset	N/A
BIOS	Phoenix(EFI) BIOS
Memory	- support up to 8GB DDR3L 1066/1333 MT/s SDRAM on two 204 pin SO-DIMM socket. (E3845/ E3826) - support up to 4GB DDR3L 1066/1333 MT/s SDRAM on two 204 pin SO-DIMM socket. (E3815)
Storage Devices	- 2x SATA II (1x SATA II switch full size mini-PCIe support mSATA)
Watchdog Timer	Programmable by embedded controller
Expansion Interface	- 1x PCIe 2.0 x1 slot - 1x Half size mini-PCIe(support PCIe & USB signal)

I/O INTERFACE

Super I/O	Winbond F81216DG
Audio	- Realtek ALC892 supports 5.1 channels - Audio Jack Line out on board
Ethernet	2x on board Intel I210IT
Serial Port	- 1x RS-232 port on rear I/O - 1x RS-232/422/485 selectable port on rear I/O - 2x RS-232 with header
USB	- 1x USB 3.0 Ports on rear I/O - 2x USB 2.0 Ports on rear I/O - 2x USB 2.0 Ports on board
Keyboard & Mouse	PS/2 on board dedicated to Keyboard & Mouse
GPIO	On board programmable 8-bit Digital I/O

DISPLAY

Graphic Controller	- Intel® HD Graphics 4600 supports DirectX 11, OpenCL® 1.2, OpenGL® 3.2 - Video decode hardware acceleration supports for H.264, MPEG2, MVC, VC-1, WMV9 and VP8 formats
Display Interface	- VGA: up to 1920x1200 - DVI: up to 1920x1200 - DP: up to 2560x1600 - LVDS: up to 1600x1200

Mechanical & Environment

Dimension	170mm(L) x 170mm(W); 6.69"(L) x 6.69"(W)
Power Supply	12~24V DC input
Environment	- Operation Temperature: 0°C~60°C - Storage Temperature: -20°C~80°C - Relative Humidity: 5%~90%, non-condensing : 5%~95%, non-condensing
Certification	CE,FCC Class A
MTBF	Over 100,000hrs at 55°C