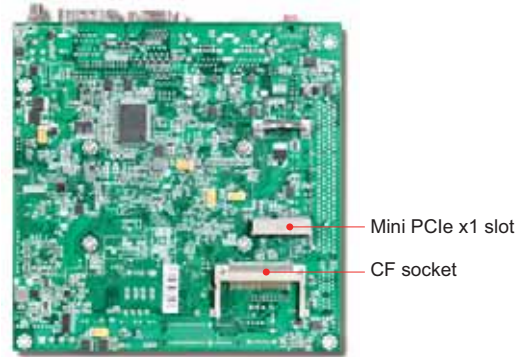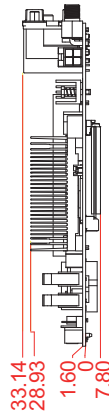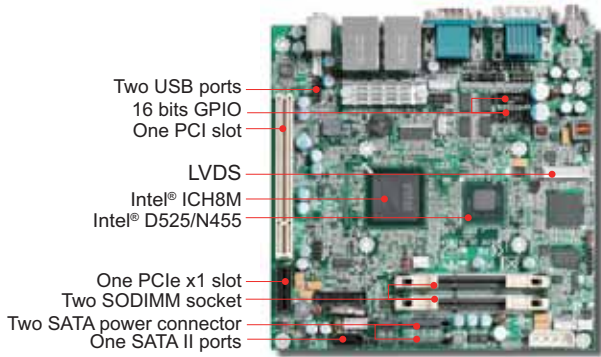# WADE-8075/76

Intel® Dual Core™ Atom™ D525 1.8GHz/N455 1.67GHz processor based Mini-ITX with DC12V input, DDR3 SDRAM, Dual display, Dual Gigabit Ethernet, Three SATA, Four COM and Six USB ports

Two USB ports
16 bits GPIO
One PCI slot
LVDS
Intel® ICH8M
Intel® D525/N455
One PCIe x1 slot
Two SODIMM socket
Two SATA power connector
One SATA II ports

Mini PCIe x1 slot
CF socket

33.14
28.93
1.60
7.80

Based on Intel® mobile ICH8M chipset, the WADE-8075/76 takes advantages of Intel® Atom™ D525/N455 technologies. WADE-8075/76 which features low power, is capable of providing dual displays such as LVDS and VGA. In addition, the fanless, low power WADE-8075/76 is the best solution for POS, Medical, Gaming and Digital Signage applications.

FEATURES

- Intel® Atom™ D525 1.8GHz/N455 1.67GHz processor
- Intel® ICH8M Chipset
- Two 204-pin SODIMMs support single channel DDR3 SDRAM up to 4GB
- Dual Display by VGA/LVDS (24 bits or 18 bits)
- One PCI-Express x1, one PCI expansion slot and one Mini-PCIe socket (with USB + PCIex1 signal)
- Three RS232 ports and one RS232/422/485 port

REAR I/O

RS232   RS232/422/485   Gigabit Ethernet   Audio
DC-in   VGA   USB
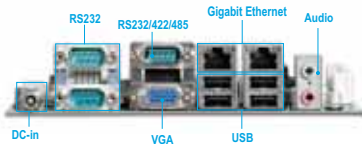
ORDERING GUIDE

AB1-3584	**(R).WADE-8075** Mini-ITX ESB.Intel® Pineview 1.8G D525 on Board+ICH8M. w/DDR3 SO-DIMM/VGA/24bits LVDS/Dual GbE/COM/Audio/USB
AB1-3585	**(R).WADE-8076** Mini-ITX ESB.Intel® Pineview 1.67G N455 on Board+ICH8M. w/DDR3 SO-DIMM/VGA/18bits LVDS/Dual GbE/COM/Audio/USB
AA1-3102Z	**PEP-5C1RX1** One PCI-E x1 Slot Riser Card for Right Expansion. PCI(no signal) +PCIe connectors.

PACKING LIST

One WADE-8075/76 Mini-ITX Main Board
One Installation CD
One SATA Cable
One SATA Power Cable
One I/O shield

GENERAL

Processor	- Intel® Atom™ D525 (1.8GHz, 13W)/ N455 (1.67GHz, 6.5W) processor in PGA 478 package - FSB 800MHz - Supports Intel® Hyper- Threading Technology, Intel® 64, Execute Disable Bit, Enhanced Intel SpeedStep® Technology (N455 only)
Chipset	Intel® ICH8M Graphics and Memory Controller (13.5W) and ICH8M
BIOS	AMI UFEI BIOS
Memory	Support single channel up to 4GB DDR3 667/800 MHz SDRAM on two 204-pin SODIMM socket (WADE-8076 support up to 2G 667 MHz SDRAM on one 204-pin SODIMM socket)
Storage Devices	- 1x SATA port 3.0Gb/s data transfer rate - 2x SATA ports with power support - 1x Compact Flash socket supports Ultra DMA100/66/33 MB/s
Watchdog Timer	Programmable via S/W from 1 sec. to 255 min.
Hardware Monitoring	FAN Speed (CPU & System), Temperature (CPU & System), Voltage, Auto throttling control when CPU overheats
Expansion Interface	- 1x PCI Express x1 slot (Gen 1, 2.5 GT/s) - 1x PCI 32-bit slot - 1x Mini-PCIe slot (Gen 1, 2.5 GT/s)

I/O INTERFACE

Super I/O	Winbond W83310DG
Audio	- Intel® ICH8M built-in High Definition Audio up to 192-kHz 24-bit - Realtek ALC892, 5.1 channels - Audio Jack DIP Light Pink/Lime
Ethernet	RTL8111D Dual Gigabit Ethernet
Serial Port	- 2x RS232 5V/12V selectable port on rear I/O - 1x RS232 5V/12V selectable with header - 1x RS232/422/485 5V/12V selectable port on rear I/O
USB	- 4x USB 2.0 ports on rear I/O - 2x USB 2.0 ports on board with header
Keyboard & Mouse	1x PS/2 Keyboard & Mouse on board
GPIO	On board programmable 16-bit Digital I/Os

DISPLAY

Graphic Controller	- Intel® ICH8M Integrated GMA 3150 Graphics supports full hardware acceleration of video decoding standards MPEG-2 - Intel® Dynamic Video Memory Technology (Intel® DVMT 4.0)
Display Interface	- Dual Channel 24-bit (WADE-8075) - Single Channel 18-bit (WADE-8076) - VGA: analog resolution up to 2048x1536 (QXGA) - LVDS: Digital LVDS resolution up to 1280x1024 (UXGA)

Mechanical & Environment

Dimension	170(L) x 170(W)mm; 6.69"(L) x 6.69"(W)
Power Supply	DC-12V input
Environment	- Operation Temperature: 0°C to 60°C - Relative Humidity: 5% to 95%, non-condensing
Certification	CE,FCC Class A
MTBF	Over 140,000 hours at 40°C

UEFI BIOS   DDR 3   SATA 3Gb   Watch DOG   H/W Monitor   GPIO   Fanless   4 COM   6 USB   2 GbE