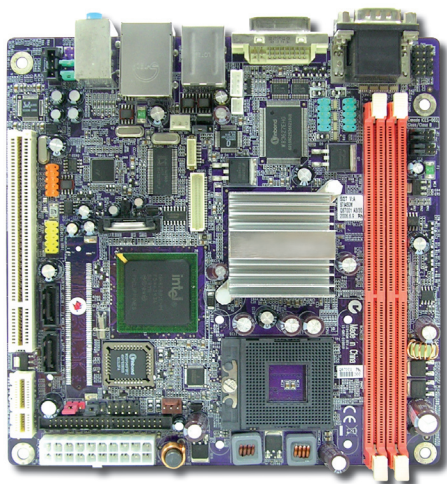# WADE-8165

Advanced Intel® Core™ Duo based Mini-ITX Board with Two Video Outputs, One GbE LAN and Six USB Ports

Feature

- Accept Intel® Core™ Duo or Solo processors
- Intel® 945GME chipset
- Max. 2 GB, DDR2 SDRAM
- Two video outputs by VGA/LVDS, VGA/DVI, LVDS/DVI
- One GbE LAN, AC97 Audio and GPIO
- One PCI-E x1 and PCI expansion slots
- Max. four COM and six USB 2.0 ports

The WADE-8165 is an advanced mini-ITX embedded system board (ESB) that takes advantage of Intel® Core Duo technologies. With its GPIO, WADE-8165 offers robust computing power and reliability for embedded applications that need a digital control interface. Dual video outputs can drive two displays simultaneously at a high speed, while maintaining superior image quality. The expansion slots, based on PCI and PCI-Express technologies, also provide the higher bandwidth and greater flexibility necessary for functional expansion.

Specification

System

CPU	Intel® Core™ Duo and solo Processors (T1000, 2000, 7000 series)
FSB	667/533 MHz
BIOS	AMI BIOS with 8Mb Flash ROM
System Chipset	Intel® 945GME + ICH7M
System Memory	2 x 240-pin DDR2 SDRAM DIMM 667/533/400 MHz supports up to 2GB
Storage	1 x Ultra DMA133/100/66/33 support two IDE devices by 44-Pin IDE connector; 2 x Serial ATA connector high-speed data transfers at up to 150 MB/s
Watchdog Timer	Reset: 1sec.~255 min. and 1sec. or 1min./step
H/W Status Monitor	Monitoring system temperature, voltage, and cooling fan status. Auto throttling control when CPU overheats
GPIO	On-board programmable 8-bit Digital I/O interface
Expansion	1 x PCI-E x1, 1x 32-bit PCI slot

I/O

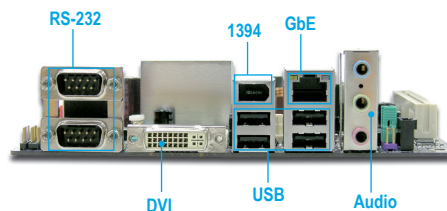|	
MIO	4 x RS-232, 1 x K/B, 1 x Mouse, 1 x 1394, 1xGbE
IrDA	115k bps, IrDA 1.0 compliant
USB	4 x USB 2.0 ports and 2 x USB 2.0 with header
Audio Codec	AC97 5.1 CH 3D audio interface
Audio Interface	Mic in, Line in, CD Audio in, Line out, Rear out and Center/Subwoofer out
Ethernet Interface	IEEE 802.3 10/100/1000BASE-T Gigabit Ethernet

Display

Chipset	Intel® 945GME Integrated Intel? GMA 950 graphics
Display Memory	Intel® DVMT3.0 supports up to 224 MB video memory
Resolution	Analog Display Port : QXGA 2048 x 1536 @ 75Hz Digital LVDS Port : UXGA 1600x1200
VGA/LCD Interface	Intel® Graphics Media Accelerator GMA 950, and supports widescreen LCD displays and accelerated DirectX* 9.0
LVDS	Dual channel 18-bit LVDS
DVI	Chrontel CH7307 DVI transmitter

Mechanical & Environmental

Power Requirment	TBD
Operating Temperature	0~60°C (32~140°F)
Operating Humidity	0%~90% relative humidity, noncondensing
Size (L x W)	6.69" x 6.69" (170 mm x 170 mm)
Weight	0.94 lbs (0.43 Kg)

Rear I/O

Ordering Information

- **WADE-8165**
  Intel® Core™ Duo and Solo Mini-ITX Board with VGA, LVDS, DVI, Audio, one GbE LANs and 6 USB 2.0 ports