







NANO-8045 takes advantage of the latest Intel® Atom $^{\text{TM}}$ technologies. It supports DDR2 SDRAM, dual displays and one Gigabit Ethernet. Based on leading edge Intel® Atom™ solution, NANO-8045 is compact with a low power dissipation board ready for Medical, Mobile, Gaming, and DS applications.

FEATURES

- Intel® Atom™ processor Z510/Z530 and System Controller Hub US15W
- One 200-pin SODIMM supports DDR2 SDRAM up to 2GB
- Dual independent display: DVI-D and 24-bit **LVDS**
- One Type II CompactFlash & two SATA II ports
- One Realtek Gigabit Ethernet
- Supports DC 12V input

REAR/IO



ORDERING GUIDE

AB1-3288	NANO-8045-1100.Nano-ITX ESB.Intel Atom 1.1G.w/ DDR SDRAM/DVI/LVDS/SATA/LAN/Audio
AB1-3289	NANO-8045-1600.Nano-ITX ESB.Intel Atom 1.6G.w/ DDR SDRAM/DVI/LVDS/SATA/LAN/Audio

PACKING LIST

One NANO-8045 NANO-ITX Main Board		
One 2-in-1 Heatsink		
One Installation CD		
One SATA Cable		



CLITCITAL	
Processor	- Intel® Atom™ Processor Z510 (1.1GHz, 2.2W)/Z530 (1.6GHz, 2W) with 512K L2 Cache in PBGA441 package - FSB: 400/533MHz - Supports Enhanced Intel SpeedStep®, Thermal Monitoring Technology
Chipset	Intel® Atom™ System Controller Hub US15WPT (2.3W)
BIOS	AMI Core 8 BIOS
Memory	Supports up to 2GB DDR2 400/533 MHz SDRAM on one 200-pin SODIMM socket
Storage Devices	- 2x SATA II support 3.0Gb/s data transfer rate by JMB362 SATA Host - 1x Type II CompactFlash socket supports Ultra DMA 133/100/66/33 MB/s
Watchdog Timer	- Programmable via S/W from 1 sec. to 255 sec.
Hardware Monitoring	- Temperature (CPU & System) - Voltage (CPU Vcore, VBAT, 5VSB, 12V, 5V, 3.3V)

I/O INTERFACE

Super I/O	Winbond W83627DHG
Audio	 Intel® US15W built-in High Definition Audio up to 192-kHz 32-bit Realtek ALC262-VC2-GR HDA codec, 2.1 channels Audio Jack on rear IO with Line-out and Mic-in Audio on board header with Line-out and Mic-in
Ethernet	- Realtek RTL8111C-VC-GR Gigabit Ethernet controller - 1x RJ45 connector on rear I/O
Serial Port	1x RS232 port with DB-9 connector on rear I/O
USB	 - 2x USB 2.0 ports on rear I/O - 4x USB 2.0 ports on borad with pitch 2.0 header, one can support client USB - 480 Mb/s bus handles high-speed/full-speed/low-speed data ranges
GPIO	On board programmable 8-bit Digital I/Os

DISPLAY

Graphic Controller	 Intel® System Controller Hub US15W integrated Intel® GMA 500 supports full hardware acceleration of video decode standards, such H.264, MPEG2, MPEG4 and WMV9 Chrontel CH7307C DVI Transmitter
Display Interface	- LVDS: Single channel 24-bit LVDS - DVI-D: One DVI-D connector on rear I/O, resolution up to 1600x1200 (UXGA)

Mechanical & Environment

Dimension	120(L) x 120(W)mm; 4.72"(L) x 4.72"(W)
Power Supply	DC-12V input
Environment	 Operation Temperature: 0°C to 55°C Storage Temperature: -20°C to 85°C Relative Humidity: 5% to 95%, non-condensing
MTBF	140,738 hours at 40°C























