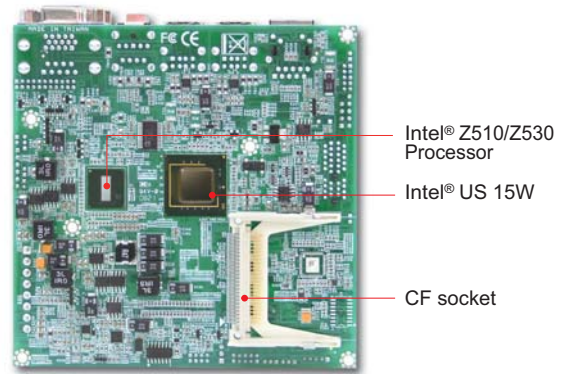
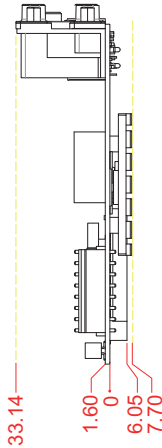
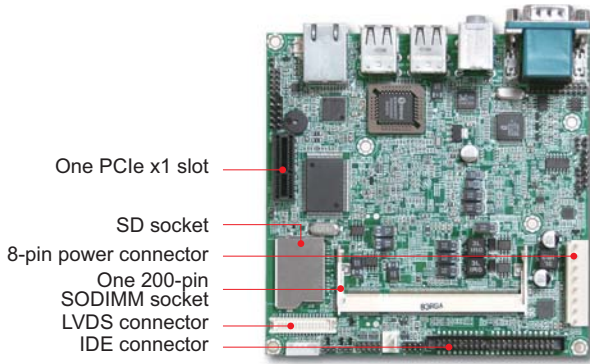


NANO-8044

Intel® Ultra Low Power Atom™ Processor based NANO-ITX Board with dual display, Gigabit Ethernet, Audio, USB and SDIO

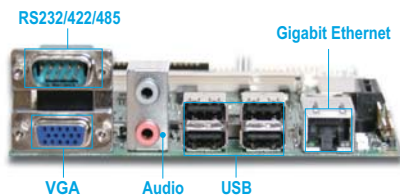


The NANO-8044 takes advantage of the latest Intel® Atom™ technologies. It supports DDR2 SDRAM, dual displays, one Gigabit Ethernet and one expansion PCI-Express x1 slot. Base on leading Intel® Atom™ solution, NANO-8044 is a compact and ultra low power dissipation board for Medical, Mobile Gaming and DSS 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: VGA and 24-bit LVDS
- One Type II CompactFlash & one IDE connector
- One Intel® Gigabit Ethernet

REAR I/O



ORDERING GUIDE

AB1-3210	NANO-8044-1100.Nano-ITX ESB.Intel Atom 1.1G.w/ DDR SDRAM/ VGA/ LVDS/ Dual Display/ GbE LAN/ Audio
AB1-3227	NANO-8044-1600.Nano-ITX ESB.Intel Atom 1.6G.w/ DDR SDRAM/ VGA/ LVDS/ Dual Display/ GbE LAN/ Audio
AA1-3078	PER-4110R.1 Slot Riser Card.PCIEx1 to PCIEx1

PACKING LIST

One NANO-8044 NANO-ITX Main Board
One 2-in-1 Heatsink
One Installation CD
One 8 pin ATX Power Cable

GENERAL

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® System Controller Hub US15W (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	- 1x EIDE supports Ultra DMA100/66/33 MB/s - 1x Type II CompactFlash socket supports Ultra DMA 133/100/66/33 MB/s - 1x SD socket supports 24MHz (SDIO Revision 1.1)
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)
Expansion Interface	1x PCI Expressx1 slot (Gen 1, 2.5 GT/s)

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 I/O with Line-out and Mic-in
Ethernet	- Intel® WG82574L Gigabit Ethernet controller - 1x RJ45 connector on rear I/O
Serial Port	1x RS232/422/485 port with DB-9 connector on rear I/O
USB	- 4x USB 2.0 ports on rear I/O - 2x USB 2.0 ports on board with pitch 2.0 header - 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 - Chronitel CH7317B-TF SDVO to RGB DAC
Display Interface	- LVDS: Single channel 24-bit LVDS - CRT: One DB-15 connector on rear I/O, resolution up to 1920x1200 (WUXGA)

Mechanical & Environment

Dimension	120(L) x 120(W)mm; 4.72"(L) x 4.72"(W)
Power Supply	+5V, +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	163,425 hours at 40°C

