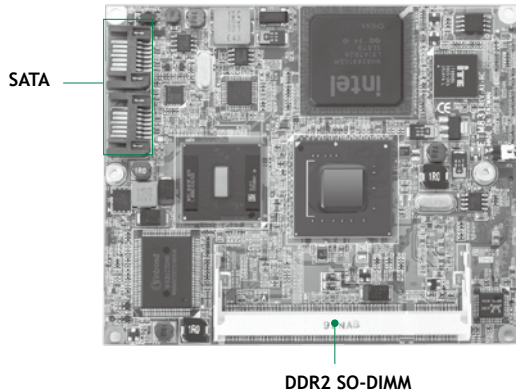


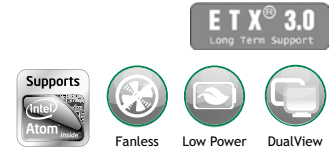
ETM831

Intel® Atom™ N270 ETX V3.0 SoM with Intel® 945GSE + ICH7M Chipset and Multiple I/O Features



Atom™ N270
Intel® 945GSE
DDR2
4 USB 2.0
HD Audio
ISA
4 PCI

Features



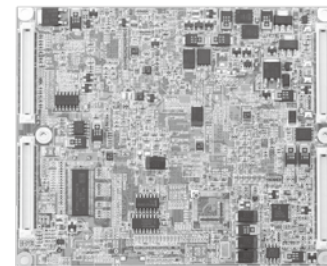
- Intel® Atom™ processor N270 1.6 GHz with FSB 533 MHz
- Intel® 945GSE + ICH7M chipset
- DDR2-400/533 max. up to 2 GB
- 2 SATA-150, 1 PATA-100 supported
- DualView with different content & resolution
- 18-bit single/dual channel LVDS LCD supported
- 4 PCI Bus master, ISA Bus supported

System

CPU	Intel® Atom™ processor N270 1.6 GHz onboard with FSB 533 MHz
System Memory	1 x 200-pin SO-DIMM supports DDR2-400/533 max. up to 2 GB
Chipset	Intel® 945GSE + ICH7M
BIOS	AMI
SSD	N/A
Watchdog Timer	255 levels, 1-255 sec.
Expansion Interface	4 x 32-bit PCI bus master 16-bit ISA bus
Battery	N/A
Power Requirements	Intel® Atom™ N270 @1.6 GHz, 1GB DDR2 Max. RMS: +5V @ 2.521A
Size	114 x 95 mm
Board Thickness	1.6 mm
Temperature	0° C - +60° C (32° F - 140° F), operation
Relative Humidity	10% - 95% relative humidity, non-condensing

I/O

MIO	1 x IDE; PATA-100 IDE 1 x FDD/ LPT (default); with SPP/ EPP/ ECP supported 1 x PS/2 keyboard 1 x PS/2 mouse 2 x UARTs 1 x IrDA (optional)
SATA	2 x SATA-150; with RAID 0/1 (ETM831VEAR only)
Hardware Monitoring	Detect CPU/system temperature, voltage and fan speed
Ethernet	1 port as 10/100Mbps supports Wake-on-LAN, PXE Boot ROM with Realtek RTL8103EL
Audio	HD Codec audio as MIC-in/Line-in/Line-out with Realtek ALC662
USB	4 x USB 2.0
SMBus	System Management Bus for advanced monitoring/control



▲ Rear view

Display

Chipset	Intel® GMA 950 graphics Core
Memory Size	Intel® DVM 3.0 compliant
Display Interface	1 x VGA 1 x LVDS; 18/24-bit single/dual channel

Packing List

Quick installation guide, user's manual/utility CD, cable

Ordering Information

Standard	
ETM831VEA-N270 (P/N: E38G831100) (Fanless)	ETX 3.0 SoM with Intel® Atom™ processor N270, VGA, LVDS, 10/100Mbps Ethernet, HD audio and 2 UARTs ports
Optional	
5078G831000E	ETM831 heatspreader
5078G830200E	ETM SoM low profile cooling kit without fan
5078G830100E	ETM SoM low profile cooling kit with fan

SBC Services and Solutions

System on Modules

Embedded SBCs
- EPIC

Embedded SBCs
- 3.5" Capa

Embedded SBCs
- Nano-ITX

Embedded SBCs
- Pico-ITX

Embedded SBCs
- PC/104

Industrial Motherboards

Slot CPU Cards

Accessories

Appendix