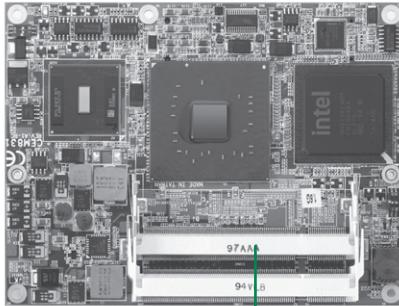


# CEM831

Intel® Atom™ N270 COM Express™ Type 2 Module with Intel® 945GME + ICH7M Chipset



Double Deck DDR2 SO-DIMM



Fanless

Low Power

DualView

Full Solid Cap Design

## System

CPU	Intel® Atom™ processor N270 1.6 GHz onboard with FSB 533 MHz
System Memory	2 x 200-pin SO-DIMM supports DDR2-533/667 max. up to 4 GB
Chipset	Intel® 945GME + ICH7M/ICH7M-DH
BIOS	AMI
SSD	N/A
Watchdog Timer	255 levels, 1~255 sec.
Expansion Interface	1 x PCIe x16 graphics port supports for SDVO or PCIe x1 devices 3 x PCIe lanes support for 3 x PCIe x1 devices (ICH7M) 5 x PCIe lanes support for 5 x PCIe x1 or 1 x PCIe x4 + 1 x PCIe x1 devices (ICH7M-DH) 4 x 32-bit PCI bus masters
Battery	N/A
Power Requirements	Intel® Atom™ N270 @1.6 GHz, 2GB DDR2 Max. RMS: +12V @ 1.171A
Size	125 x 95 mm
Board Thickness	1.6 mm
Temperature	0° ~ +60°C (32°F ~ 140°F), operation
Relative Humidity	10% ~ 95% relative humidity, non-condensing

## I/O

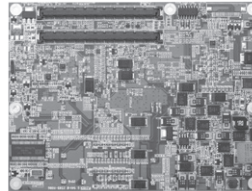
MIO	1 x PATA-100 IDE 1 x LPC interface
SATA	2 x SATA-150 ports
Hardware Monitoring	N/A
Ethernet	1 port as 10/100/1000Mbps supports Auto MDI-X, Wake-on-LAN, RPL/PXE Boot ROM with Intel 82583V
Audio	HD/AC'97 link interface to baseboard for external Codec
USB	8 x USB 2.0
SMBus	Yes
GPIO	4 channels IN & 4 channels OUT

## Display

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

## Features

- Intel® Atom™ processor N270 1.6 GHz with FSB 533 MHz
- Intel® 945GME + ICH7M chipset
- 2 DDR2 SO-DIMM up to 4 GB
- 19 lanes for PCIe
- 8 USB 2.0 ports



▲ Rear view

## Packing List

Quick installation guide, user's manual/utility CD

## Ordering Information

### Standard

CEM831VG-N270	COM Express type 2 module with Intel® Atom™ N270 CPU, (P/N: E38D831100)
	VGA, LVDS, and 10/100/1000Mbps Ethernet (Fanless)

### Optional

CEB94000	ATX form factor baseboard
5078D831000E	CEM831 Heatspreader
5078D830100E	COM Express SoM cooling kit with fan
5078D830200E	COM Express SoM cooling kit without fan