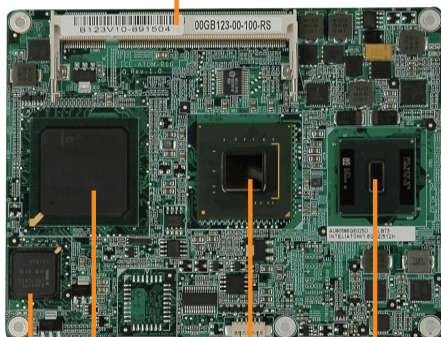


# ICE-ATOM

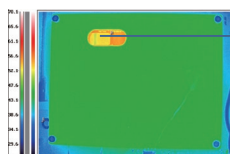
COM Express Basic Type 2 Module, Intel® Atom™ Processor, VGA/LVDS, GbE, SATA, USB and Audio

**Fanless support with Heatspreader Only**

DDR 2 400/533 up to 2GB

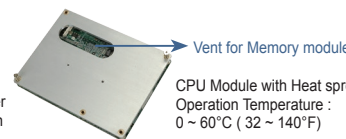


Intel® ICH7M    Intel® 945GSE    Intel® Atom™ Processor N270  
Intel® 82541PI GbE



Memory

Ultra low power Fanless design



Vent for Memory module  
CPU Module with Heat spreader  
Operation Temperature : 0 ~ 60°C ( 32 ~ 140°F)

## Power Saving / Cost Saving for Thermal design

IEI Model	ICE-9152-R10	ICE-9102-1GZ-R10 ICE-9102-1G512-R10	ICE-ATOM-N270-R10
CPU	Socket 479 Intel® Pentium® M, Celeron® M processor with a 533/400MHz FSB	On board Intel® Celeron® M 1GHz zero cache or 1GHz 512KB cache processor	Intel® Atom™ Processor N270 1.6GHz with a 533MHz FSB
System Chipset	Intel® 915GME + ICH6-M	Intel® 910GMLE + ICH6-M	Intel® 945GSE + ICH7M
BIOS	AMI Flash BIOS	AMI Flash BIOS	AMI Flash BIOS
System Memory	One 200-pin 533/400MHz DDR2 SO-DIMM support up to 2GB	One 200-pin 400MHz DDR2 SO-DIMM support up to 2GB	One 200-pin 533/400MHz DDR2 SO-DIMM support up to 2GB
Ethernet	One Intel 82541PI GbE Chipset	One Intel 82541PI GbE Chipset	One Intel 82541PI GbE Chipset
I/O Interface	8 x USB 2.0 / 2 x SATA 1 x IDE channel 1 x PCIe x16 signal or 2x SDVO signal	8 x USB 2.0 / 2 x SATA 1 x IDE channel 2 x SDVO signal 4 x PCIe x1 signal 4 x PCI , 32 bit / 33 MHz PCI bus	8 x USB2.0 / 2x SATA IDE channel 1 x SDVO signal 4 x PCIe x1 signal 4 x PCI , 32 bit / 33 MHz PCI bus
Display Interface	VGA Integrated in Intel 915GME Signal 18/24-bit Dual channel LVDS Signal	VGA Integrated in Intel 910GMLE Signal 18/24-bit Dual channel LVDS Signal	VGA/HDTV Integrated in Intel 945GSE Signal 18-bit Dual channel LVDS Signal
Power Supply	AT / ATX supported	AT / ATX supported	AT / ATX supported
Power consumption	12V@2.09A (Pentium® M 1.5GHz)	12V@1.33A (Celeron® M 1GZ/Celeron M 373)	12V@0.95A (ATOM N270)
Thermal Solution	Heat Spreader with Cooler	Heat Spreader with Heat sink	Heat Spreader Only

## Specifications

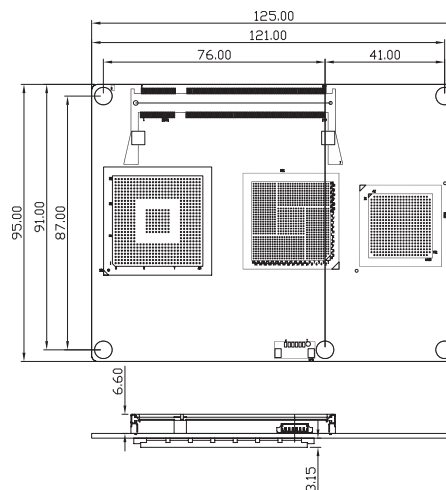
- ◆ CPU  
Intel® Atom™ Processor N270 1.6GHz with a 533MHz FSB
- ◆ System Chipset  
Intel® 945GSE  
Intel® 82801GBM/ICH7M
- ◆ BIOS  
AMI BIOS
- ◆ System Memory  
One 200-pin 533/400MHz DDR2 SO-DIMM supported (system max. 2GB)
- ◆ Ethernet  
One Intel 82541PI GbE Chipset
- ◆ I/O Interface  
8 x USB 2.0 (to Base Board)  
2 x SATA (to Base Board)  
1 x IDE channel (to Base Board)
- ◆ Expansion  
1 x SDVO signal to Base Board  
4 x PCIe x1 signal to Base Board  
4 x PCI , 32 bit / 33 MHz PCI bus to Base Board
- ◆ Display Interface  
VGA/HDTV Integrated in Intel 945GSE Signal (to Base Board)  
18-bit Dual channel LVDS Signal (to Base Board)
- ◆ Watchdog Timer  
Software programmable supports 1 ~255 sec. System reset (Depend on Super I/O of Base Board)
- ◆ Power Supply  
AT / ATX supported
- ◆ Power consumption  
12V@0.95A (Intel® Atom™ N270 with 1GB DDR2)
- ◆ Temperature  
operation: 0°C~ 60°C (32°F ~140°F)
- ◆ Humidity  
operation: 5% ~95 non-condensing
- ◆ Dimension  
125 mm x 95 mm
- ◆ Weight  
GW: 700g NW 250g



## Features

1. COM Express Type II Basic Module
2. Support 1x SDVO, 4x PCIe x1, 4x PCI Slot for expansion
3. Support Dual Display for VGA + LVDS
4. Support 8x USB2.0, 2x SATA, 1x IDE Interface
5. Ultra Low power design for Fanless solution

## Dimensions (mm)



## Packing List

- 1 x ICE-ATOM Single Board Computer
- 1 x Heatspreader
- 1 x Utility CD
- 1 x QIG (Quick Installation Guide)

## Ordering Information

Part No.	Description
ICE-ATOM-N270-R10	COM Express Basic type 2 Module with Intel® Atom™ N270 1.6G, VGA/LVDS, GbE, USB, SATA and Audio
ICE-DB-9S-R10	Base Board for COM Express Type 2 modules
34000-000231-RS	Heatsink for COM Express Module