



## Main Features

- Low Power COM Express CPU Module
- On-board Intel® Atom™ N270 1.6GHz Processor
- Intel® 945GSE Chipset
- Support DDR2 400/533 SO-DIMM up to 2GB
- Realtek RTL8111C GbE LAN Controller
- Support 2 x SATA, 8x USB for fast peripherals
- COM Express Basic Type II Module supports up to 5 Express lanes, 32 bit PCI interface and one IDE and Gigabit LAN

## Specifications

### CPU Support

- On-board Intel® Atom™ N270 1.6GHz processor

### Chipset

- Intel® 945GSE and ICH7M chipsets

### Main Memory

- Support one un-buffered non-ECC DDR2 SO-DIMM 400/533 up to 2GB

### BIOS

- Award system BIOS
- Advanced Power Management support
- 8M SPI ROM

### Display

- Intel® 945GSE integrated graphics solution with dynamic video memory allocation
- Analog monitor resolution up to 1600x1200 @ 85Hz
- Support single or dual channel 18-bit LVDS panel
- SDVO signal down to connector CD

### On-board LAN

- Realtek RTL8111C 10/100/1000 Gigabit LAN controller
- Support PXE LAN boot function
- Support Wake on LAN function
- Signals down to I/O board

### Other Interfaces

- One 3-pin 12V FAN connector

### COM Express Connector

- AB connector  
VGA/LVDS/8 x USB/HD Audio interface/2 x SATA/LAN/GPIO(3.3V)/  
LPC bus/1 x PCIe x4/1 x PCIe x1/SMBus/I<sup>2</sup>C/SPI BIOS

- CD connector  
IDE  
PCI  
SDVO B

### Power Requirements

- +12V, +5VSB, +3.3V RTC power
- Support AT and ATX power supply

### Dimensions

- 95mm (W) x 125mm (L)

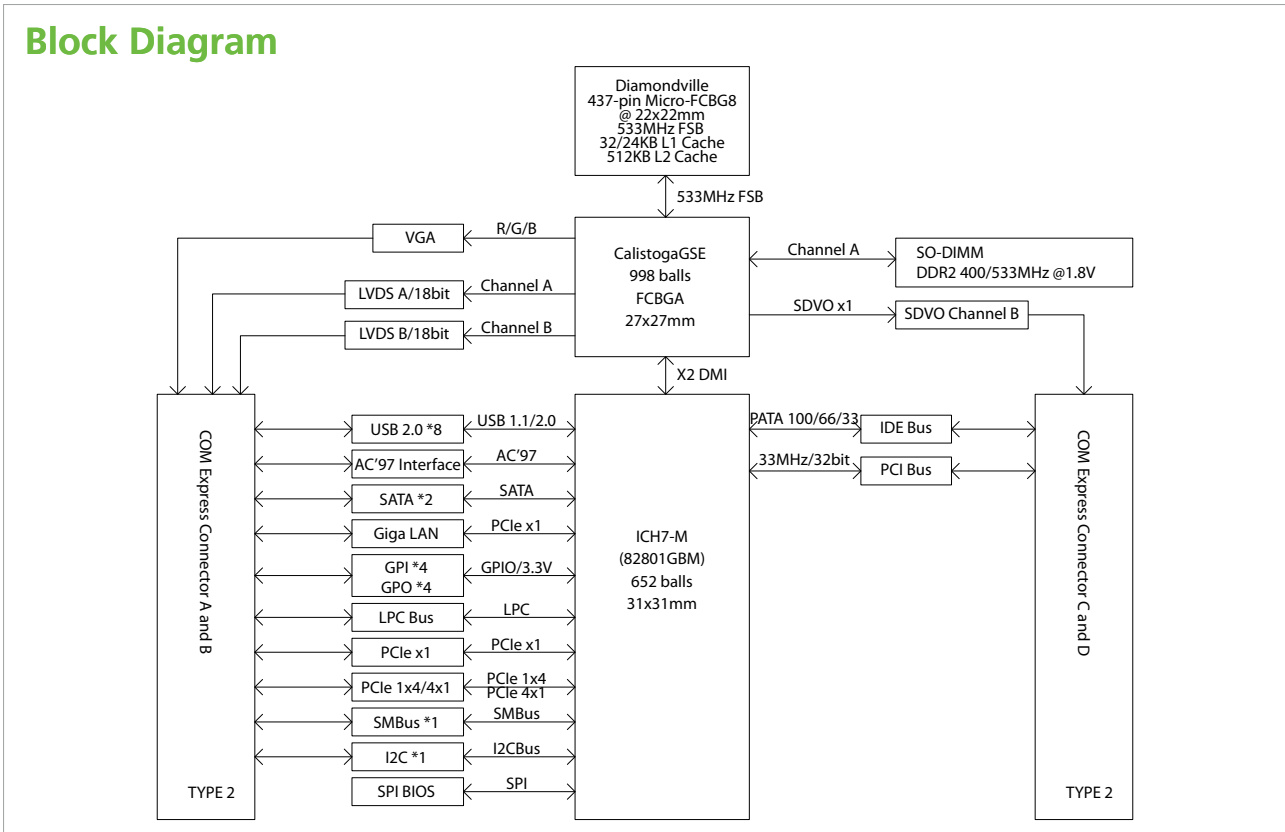
### Environment

- Operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 80°C
- Relative humidity:  
10% to 90% (operating, non-condensing)  
5% to 95% (non-operating, non-condensing)

### Certifications

- CE approval
- FCC Class A

## Block Diagram



## Ordering Information

- ICES 270 (P/N:10K00027000X0)**  
 COM Express Type 2 basic module with Intel® Atom™ N270 1.6GHz/ 945GSE, DDR2/ PCIe/ PCI/ IDE/ GbE/ LVDS/ audio interface
- ICEB 8050 (P/N: 10KB0805000X0)**  
 COM Express Type 2 evaluation board with PCIe/ PCI/ SATA/ CF/ IDE/ COM/ USB/ LVDS/ VGA/ LAN