

Main Features

- Intel® 3rd generation Intel® Embedded Core™ rPGA988 embedded processors family
- Intel® QM77 PCH (HM76) chipset support PICMG COM.0 Rev. 2.0 Type 2, pin-outs
- Support two DDR3 SO-DIMMs 1333/1600 non-ECC up to 16GB
- Support PCIe16 (Gen3.0), 5x PCIe1, 12x USB2.0, 2x SATA3.0/ 2x SATA2.0 and 1x GbE
- Support VGA, dual channels 18/24-bit LVDS and optional 1x DDI/ SDVO by PEG
- Dimension: 95mm (mm) x 125mm (L)

Product Overview

The ICES 268 is a Type 2 COM Express Basic Module featuring Intel® QM77 PCH (option HM76) chipset supports Intel® 3rd generation Intel® Core™ i7/i5/i3 rPGA988 processors up to i7-3610QE (4x 2.3GHz/ max. TDP 45W) with two DDR3 SO-DIMMs 1333/1600MHz non-ECC up to 16GB.

The 3rd Generation Core i7/ i5/ i3 processors integrated with Intel® HD graphics with DX11 support one PCIe16 (Gen 3.0) to carrier board. The optional 1 x DDI interfaces port B, allows ICES 268 implement SDVO to HDMI, DVI, DP port by add-in EBK-A2HDMI. The high performance ICES 268 COM Express Basic Module supports 4x SATA3.0/ 2.0, 8x USB 2.0, 5x PCIe1 lanes and 1x Gigabit Ethernet through the carrier board; NEXCOM is offering standard Type 2 carrier board, ICEB 8050C as well as hardware-ready evaluation starter-kit, ICEK 8050C-T2 build-in 10.4" LCD panel, Flex-ATX power supply to help device makers and equipment builders may evaluate full set of I/O function and add-in cards at early development stage.

Specifications

CPU Support

- Support Intel® 3rd generation Core™ i7/i5/i3 embedded rPGA988 processors
 - Intel® Core™ i7-3610QE (4x 2.3GHz/ 6MB cache/ Max. TDP 45W)
 - Intel® Core™ i7-3610ME (2x 2.7GHz/ 3MB cache/ Max. TDP 35W)
 - Intel® Celeron® B810 (2x 1.6GHz/ 2MB cache/ Max. TDP 35W)

Main Memory

- Two DDR3 SO-DIMMs, 1333/1600 MHz SDRAM non-ECC up to 16GB

Platform Control Hub

- Intel® QM77 PCH (option HM76) chipset

BIOS

- AMI UEFI System BIOS
- Plug and play support
- Advanced Power Management and ACPI support

Display

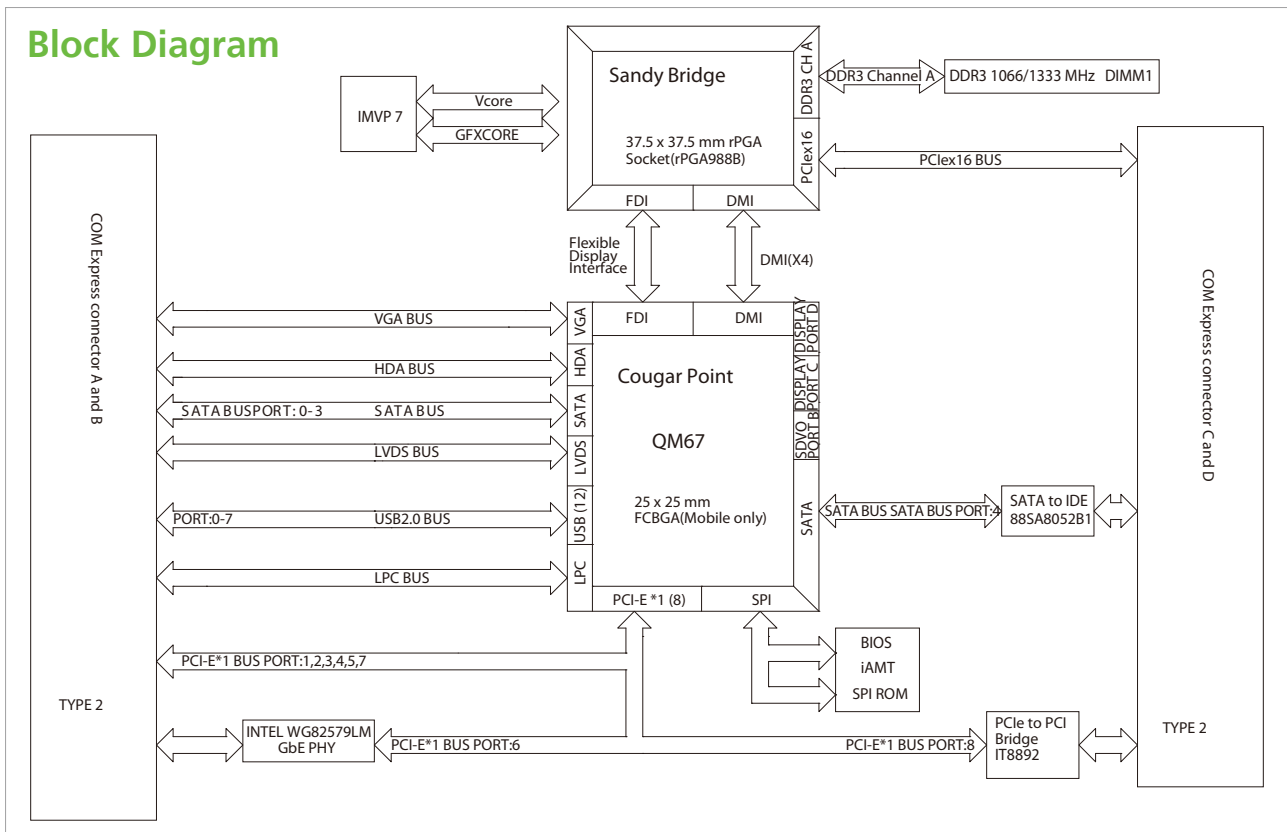
- Intel® HD graphics with DX11 support and supports Triple independent displays
- One PCI Express x16 Lane (Gen 3.0) down to the carried board
- Supports VGA, single/dual channels LVDS 18/24-bit interfaces
- Optional 1x DDI port B support HDMI, DVI, DisplayPort and SDVO by PEG with EBK-A2HDMI

Audio

- HD audio interface

On-board LAN

- Intel® 82579LM Gigabit Ethernet, support iAMT 8.0 (supported by QM77 only)
- Support boot from LAN, wake on LAN function
- Signals down to I/O board



COM Express Connector

- AB
VGA/ LVDS/ 8x USB 2.0, HD Audio/ 2x SATA3.0, 2x SATA 2.0/ GbE/ GPIO/ LPC bus/ 5 x PCIe1/ SMBus (I2C)/ SPI BIOS / SPK out
- CD
PCIex16 (Gen. 3.0) / PCI (v2.3)/ IDE

Power Requirements

- +12V, +5VSB, +3.3V RTC power

Dimensions

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

Environment

- Board level operating temperatures: -15°C to 60°C
- Storage temperatures: -20°C to 80°C
- Relative humidity:
- 10% to 90% (operating, non-condensing)
- 5% to 95% (non-operating, non-condensing)

Certifications

- Meet CE
- FCC Class A

Ordering Information

- **ICES 268 (P/N: 10K00026800X0)**
COM Express type 2, basic Module QM77 support Intel® 3rd Generation Core™ rPGA988 embedded processors, non-ECC DDR3/ 2x SO-DIMMs
- **ICES 268 F- kit (P/N: 10K00026801X0)**
COM Express Active fan kits with heat-spreader, heat-sink and cooling fan for ICES268
- **ICEB 8050C (P/N: 10KB0805001X0)**
COM Express Type 2, COM.0 Rev. 2.0 Evaluation CRB, VGA/ LVDS/ 8x USB 2.0/ 2x COM/ GbE/ LPT/ 5.1 HD/ SPDIF, CF/ IDE/ mSATA/CFast/ PCIe x16/ PCIe x4/ PCIe x1/ PCI/ mPCIe, ATX power input