

Main Features

- Intel® Atom™ Dual Core processor D2700, 2.13GHz
- Intel® ICH10R to support Intel® Matrix Storage RAID 0/1/5/10
- 1x DDR3 SO-DIMM socket up to 4GB
- Type 2 COM Express compact size to support 5 Express lanes, 32 bit PCI interface, one IDE, Gigabit LAN and HDMI

Product Overview

The ICES 254 is a COM Express Type 2 compact module that features Intel® Atom™ Dual-Core processor D2700 with ICH10R chipset to support RAID 0/1/5/10, and one DDR3 SO-DIMM memory socket up to 4GB DDR3 SDRAM/ 1067MHz.

The ICES 254 integrates with Intel® HD graphics engine to support dual displays of CRT resolution up to 1920x 1200 @ 60Hz, single channel 18-/ 24-bit LVDS up to 1440x 900 and HDMI 1080p. The high performance ICES 254 COM Express module supports 4x SATA, 8x USB 2.0, IDE, PCI, five PCIe x1 lanes and HDMI through the carrier board. ICES 254 is compatible with NEXCOM in-house designed ICEB 8050 carrier board.

Specifications

CPU Support

- Intel® Atom™ Dual Core processor D2700 2.13Ghz

Chipset

- Intel® ICH10R chipset

Main Memory

- One DDR3 1067MHz SO-DIMM socket up to 4GB

BIOS

- AMI System BIOS
- Plug and play support
- ACPI 3.0b

Display

- Intel® HD graphics with DX10 support
- One HDMI down to the carried board
- Support single channel 18/24-bit LVDS

Audio

- HD audio interface

On-board LAN

- Intel® 82574L GbE controller, support boot from LAN, wake on LAN function
- Signals down to I/O board

COM Express Connector

- AB
VGA/ LVDS/ GbE/ 8 x USB 2.0/ HD Audio/ 4 x SATA/ LAN/ GPIO (3.3V)/
LPC bus
Five PCIe X1/ SMBus (I2C)/ SPI BIOS
- CD
IDE, PCI, HDMI

Power Requirements

- +12V, +5VSB
- Support both AT and ATX power supply mode
- One 3-pins 90 degree edge-connector for DC + 12V fan

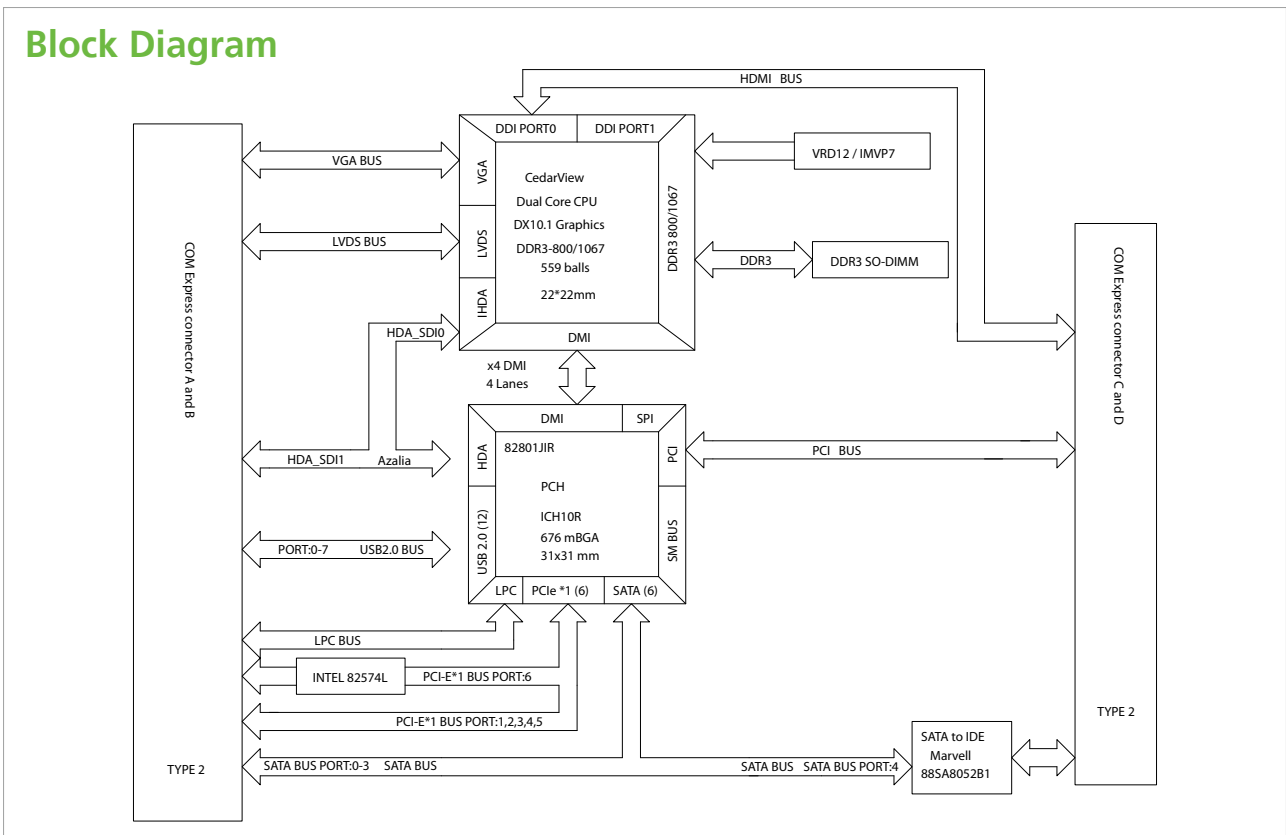
Dimensions

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

Environment

- Board level operating temperatures: 0°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)

Block Diagram



Certifications

- CE approval
- FCC Class A

Ordering Information

- **ICES 254 (P/N:10K00025400X0)**
COM Express Type 2 basic module with Intel® Atom™ D2700
2.13GHz/ ICH10R/ DDR3/ GbE/ 4SATA/ IDE/ LVDS/ 5xPCIe and HDMI
- **ICEB 8050 (P/N: 10KB0805000X0)**
COM Express Type 2 evaluation board with PCIe/ PCI/ SATA/ CF/ IDE/
COM/ USB/ LVDS/ VGA/ LAN