ICES 671

COM Express Type 6, COMPACT Size Module with 4th Gen. Intel® Core™ i7/i5/i3 processors

MCP solution, DDR3L/GbE/4SATA/4 x PCIex1/DP/2 x USB3.0

Main Features

- 4th gen. Intel® Core™ i7/i5/i3 processor (co-layout with boardwell MCP)
- Triple independent display integrated GT1/GT2/GT3 to support: VGA, dual 18-/24 LVDS, HDMI, DP, DVI
- Dual DDR3L/SO-DIMm (1600Mhz) up to 16GB without ECC memory support
- Up to 2 x USB3.0/8 X USB2.0/4 x SATA 3.0/4 x PCIex1/WDT/GPIO/ I2C
- Dimension 95 x 95mm (W x L)

Product Overview

The ICES 671 is a COM Express Type 6 compact size module that features 4th generation Intel® Core™ i7/i5/i3 or Celeron® FCBGA1168 processor and dual DDR3L SO-DIMM memory socket 1600Mhz without ECC support, up to 16 GB. ICES670 is COM Express Type 6 pin-outs, compact module (95 x 95mm) to follow COM.0 Rev. 2.0, This new ICES671 supports dual DDR3L (without ECC) SO-DIMM (1600MHz) up to 16 GB, and advanced I/O interfaces such as PCI Express gen 2.0, 4 x SATA3.0, and 2 x USB3.0. ICES671 is integrated with Intel GT1/GT2/GT3 Integration graphic for powerful graphic processing and three-display capability through display interfaces like HDMI/DVI/Display Port/CRT, and dual channels LVDS. The Compact size COMe express module of ICES671 applied latest Intel shark bay-U MCP solution with lower power TDP(15W) and highest graphic and computing performance, which is ideal for application with high graphic requirement and multiple display connectivity, such as medical, digital signage, automation and surveillance applications.

Specifications

CPU Support
- 4th generation Intel® Core™ i7/i5/i3 processor MCP

Main Memory
- Dual DDR3L/SO-DIMMs, without ECC support 1600MHz memory up to 16GB

BIOS
- AMI UEFI BIOS
- Plug and play support
- Advanced Power Management and Advanced Configuration & Power Interface support

Display
- Intel® HD Graphic /GT1/GT2/GT3 with DX 11.1 , OGL 3.2, OCL 1.2 support
- Single and dual channel 18/24 LVDS
- VGA interface (1920 x 1200)
- DDI 1 with HDMI/DP/DVI support (DDI2: optional)

Audio
- HD audio interface

On-board LAN
- Intel® I218LM GbE controller, support boot from LAN, wake on LAN
- Support PXE boot from LAN, wake on LAN function

- Signals down to I/O board

COM Express Connector
- AB :
  VGA/LVDS/HDA/4 X SATA/GbE/4 x PCIex1/8 X USB2.0
  LPC bus/GPIO/SMBus (I2C)/SPI BIOS
- CD :
  2 x USB3.0/2 x DDI (DDI2 Optional)

Power Requirements
- +12V, +5VSB, +3.3V RTC power
- Support both AT and ATX power supply mode
- One 3 pins 90 degree edge-connector for DC +12V fan
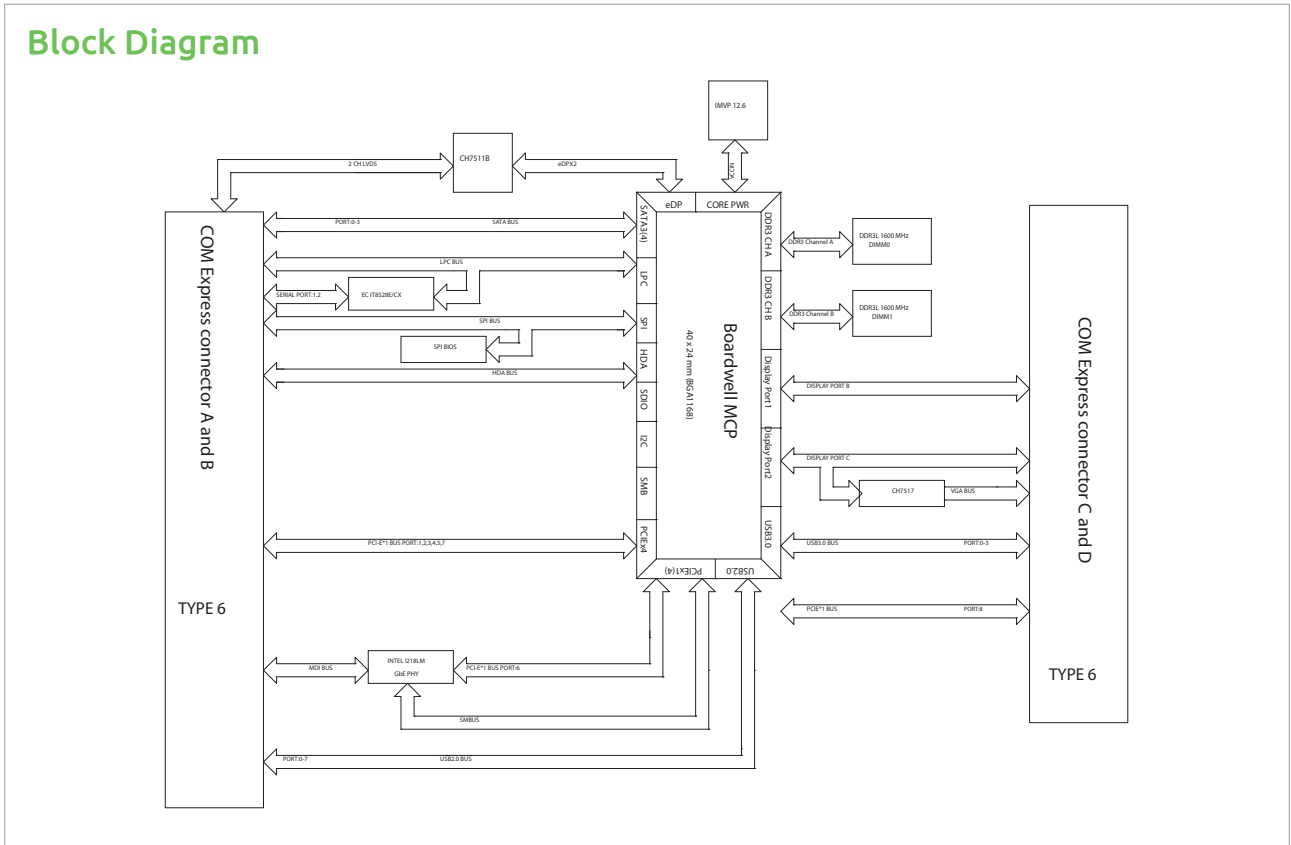
Dimensions
- 95mm (W) x 95mm (L)

Environment
- Board level operating temperatures: -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 B

NEXCOM

Block Diagram

Ordering Information

- **ICES 671-4300U (P/N: TBD)**
  COM Express Type 6 Compact module with 4th generation Intel®
  Core™ i7/i5/i3 processor MCP/2C, 1.9GHz/DDR3L without ECC/PCIe/
  HDMI/VGA/SATA/GBE

- **ICES 671-2980U (P/N: TBD)**
  COM Express Type 6 Compact module with 4th generation Intel®
  Core™ i7/i5/i3 processor MCP/2C, 1.6GHz/DDR3L without ECC/PCIe/
  HDMI/VGA/SATA/GBE

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