



Main Features

- 8/9th Generation Intel® Core™ Processors, **socket 1511**, PCH C246
- 2 channel DDR4 with ECC or non-ECC SO-DIMM 2666MHZ up to 32GB
- Support triple display VGA, 2 x DP, eDP/LVDS 24bit dual channel.
- PCI Express Lane x16 (configurable: "1 x16" ; "2 x8" ; "1 x8 + 2 x4")
- PCI Express Lane x1 (Gen 3), 8x (can be configured x1, x4)
- IO: 2 x UART(RX/TX), 8 Bit DIO, WDT, TPM(Optional)

Product Overview

The ICES675S Series is a COM Express Type 6-pinouts Basic module which featuring Intel® C240 series PCH chipset supports Intel® 8/9th Generation Intel® Core™ Processors, **socket 1511**, DDR4 with ECC or non-ECC SO-DIMM 2666MHZ up to 32GB. The ICES675S-NCB integrated Intel® HD Graphics engines support or expands via PCI Express Graphic 1 x 16 lanes and support three DDI (Digital Display Interface) to follow the standard of PICMG COM2.0 specification. It allows type 6-pinout Carrier board to implement DDI and legacy VGA interface.

The high performance ICES675 COM Express Basic Module supports 1 x GBE LAN, 4 x USB3.1 GEN1, 8 x USB2.0, 4 x SATA3.0, 2 x UART(TX/RX), HD Audio, 8 bit DIO, TPM (Optional) ICEB 8060 as well as customized solution for your embedded projects.

Specifications

CPU / Chipset

- 8/9th Intel® (Coffee Lake-S) Core™ i9/ i7/ i5 /i3 Processor, **LGA1151 Socket, TDP MAX 65W**
- CPU Support List:
65W: i7-8700(6c) / i5-8500(6c) / i3-8100(4c)(with ECC)
35W: i7-8700T(6c) / i5-8500T(6c) / i3-8100T(4c) (with ECC)
35W: i7-9700TE(8c) / i5-9500TE(6c) / i3-9100TE(4c) (with ECC)

- PCH C246

Main Memory

Dual channel DDR4 SO-DIMM memory Socket with non-ECC support, up to 32 GB 2666MHZ, ECC support as option with Intel®i3-8100, i3-8100T, i3-9100TE

Display

- Integrated Intel® Gen9 Graphics graphic engine
- 1 x VGA connector (resolution up to 1920x1080@60Hz).
- 1 x LVDS connector(resolution up to 1920x1080@60Hz).
- DDI 1/2 Port configurable to HDMI1.4/DVI/Display port 1.4 HDMI up to 4096 x 2160@30Hz/24bpp, DVI up to 1920 x1200@60Hz, DP up to 4096 x 2304 @ 60Hz)

BIOS

- AMI (UEFI)

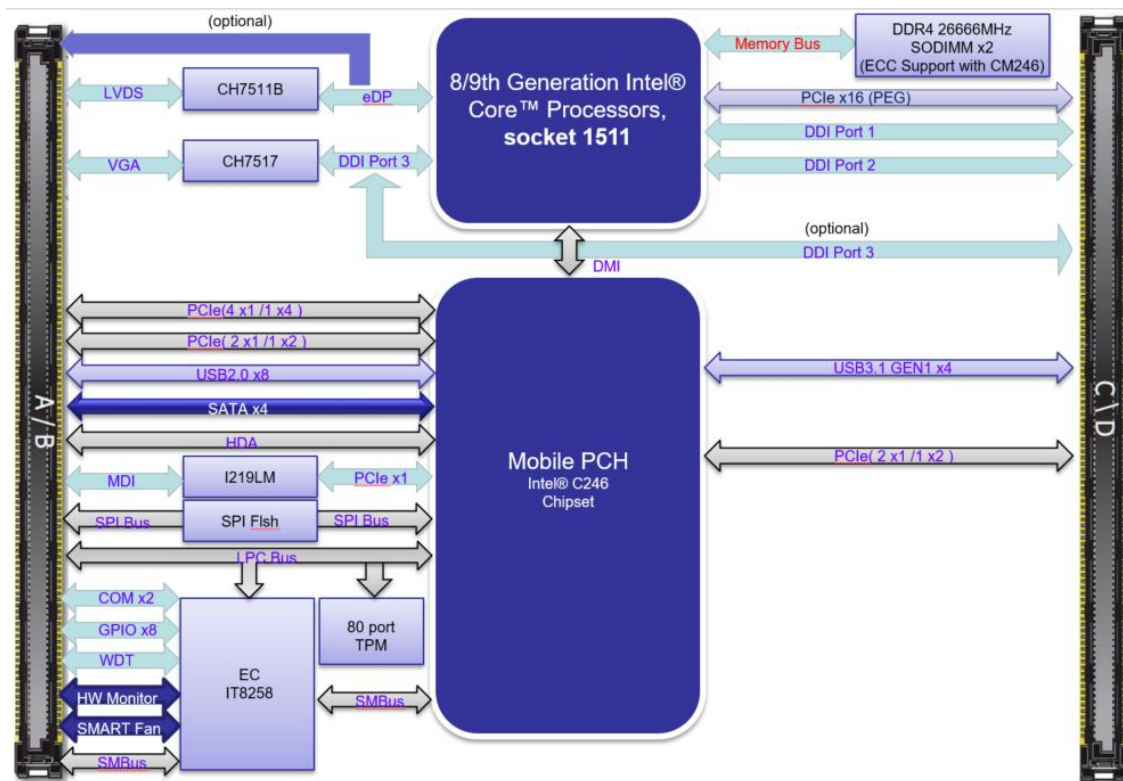
COM Express Connector

- AB :LVDS:(LVDS/eDP co-lay), VGA:(VGA/DDI port3 co-lay), 1 x GbE LAN, 6x PCIe x1, HD Audio, 4 x SATA III, 8 x USB2.0, LPC Bus, SM Bus/I2C, 2 x COM, GPIO 8bit
- CD : DDI1, DDI2, 1 x PCIe x16, 2 x PCIe x1, 4 x USB3.0

Power Requirement

- +12VDC, +5Vsb
- Support both AT and ATX power supply mode

Black Diagram



Dimensions

- 125mm x 95mm

Environment

- Board level operation temperature : -0°C to 60°C
- Storage temperature : -20°C to 85°C
- Relative humidity:
10% to 95% (operating, non-condensing)
5% to 95% (non-operating, non-condensing)

Certifications

- Meet CE / FCC Class B

Ordering Information

Barebone

- ICES675S (P/N:10K00067508X0)**
COM Express Type 6, Basic Module, 8/9th Generation Intel® Core™ LGA1151 Processor, C246 PCH with 6 core support, Support dual channel DDR4 with ECC and non-ECC SO-DIMM 2666MHZ up to 32 GB, Support 1 PCIe x16 / 8 PCIe x1 / 4 x USB3.1 / 8 x USB2.0 / 4 SATA 3.0 and GBE, LVDS(eDP Optional) / VGA (DDI3 Optional) / DDI 1 / DDI 2

Optional Accessories

- CPU Cooler (P/N:5050200161X00)**
- TPM 2.0 Module KIT (P/N:79E00TPM01X00)**