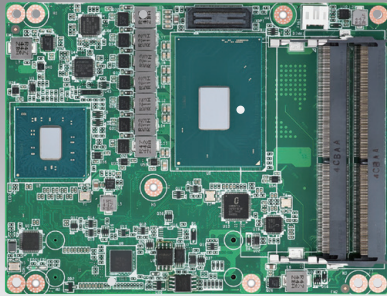


SOM-5897

6th Gen Intel Xeon/Core/Celeron Processors COM Express Basic Module Type 6



Features

- 6th Gen Intel Xeon/Core i7/i5/i3/Celeron + PCH QM170
- Dual DDR4 2133, 1.2V Low Power Memory, Max. 32GB
- Support XDP, TPM2.0
- Flexible I/O support: 8 PCIe x1 (Gen3) with LAN, TPM2.0
- Supports iManager SUSIAccess, and Embedded Software APIs

Software APIs:

- Watchdog
- I²C
- SMBus
- HW Monitor
- GPIO
- Brightness

Utilities:

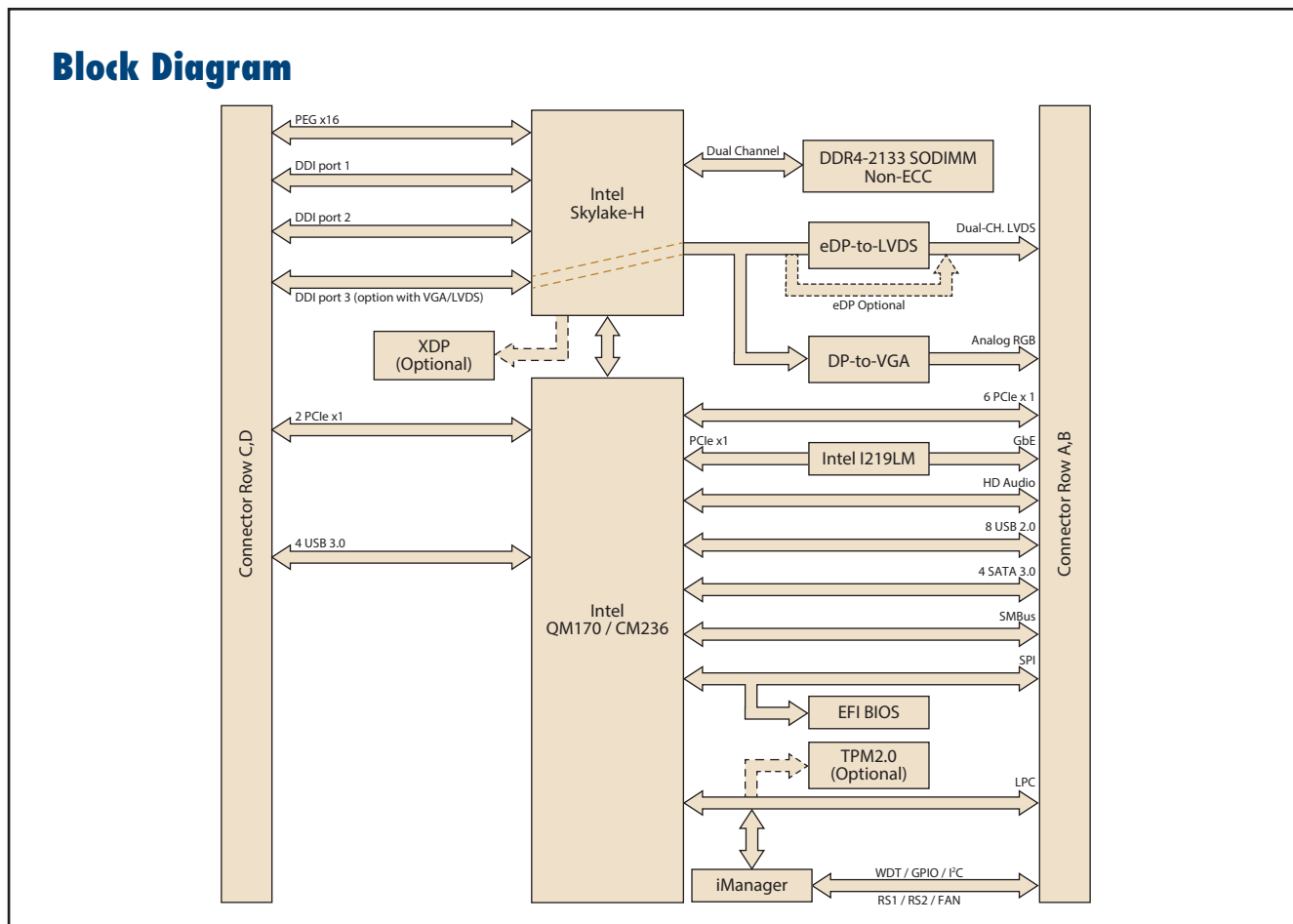
- BIOS flash
- Monitoring
- Embedded Security ID



Specifications

| | | | | | | | | | | |
|-------------|----------------------|---|---------------|---------------|---------------|---|---------------|---------------|-------------------------|-------------|
| Compliance | Form-Factor | COM Express Basic Module | | | | | | | | |
| | Pin-out Type | COM Express R2.1 Type 6 pin out | | | | | | | | |
| Platform | Processor | i7-6820EQ | i7-6822EQ | i5-6440EQ | i5-6442EQ | i3-6100E | i3-6102E | G3900E | E3-1505M V5 | E3-1505L V5 |
| | Base Frequency | 2.8GHz | 2.0GHz | 2.7GHz | 2.7GHz | 1.9GHz | 1.9GHz | 2.4GHz | 2.8GHz | 2.0GHz |
| | Turbo Boost Freq. | 3.5GHz | 2.8GHz | 3.4GHz | 2.7GHz | - | - | - | 3.7GHz | 2.8GHz |
| | Core/Tread | 4/8 | 4/8 | 4/4 | 4/4 | 2/4 | 2/4 | 2/2 | 4/8 | 4/8 |
| | LLC | 8 | 8 | 6 | 6 | 3 | 3 | 2 | 8 | 8 |
| | CPU TDP | 45W | 25W | 45W | 25W | 35W | 25W | 35W | 45W | 25W |
| | Chipset | Core with QM170; Xeon with CM236 | | | | | | | | |
| | BIOS | AMI UEFI 128Mbit | | | | | | | | |
| Memory | Technology | DDR4 | | | | | | | | |
| | ECC Support | Not supported | Not supported | Not supported | Not supported | Not supported | Not supported | Not supported | Support | Support |
| | Channel/Socket | Dual Channels / 2 sockets | | | | | | | | |
| | Max. Capacity | Up to 32GB | | | | | | | | |
| Graphics | Controller | Intel Gen 9 | | | | | | | Intel® HD Graphics P530 | |
| | Base/Turbo Freq. | 350/1000 | 350/1000 | 350/1000 | 350/1000 | 350/950 | 350/950 | 350/950 | 350/1050 | 350/1000 |
| | Graphics Memory | Intel DMVT5.0, share memory up to 1024MB | | | | | | | | |
| Display | 3D/HW Acceleration | HW Encode: H.265/HEVC, H.264, MPEG2, HW Decode: H.264, Direct3D 12(2015)/11.2/11.1/10/9, Direct2D, OpenGL 4.4, OpenCL 2.0/1.2 | | | | | | | | |
| | VGA | 1 port up to 1920 x 1200 @ 60 Hz | | | | | | | | |
| | LCD | LVDS Dual Channel 18/24-bit, up to 1920 x 1200 @ 60Hz | | | | | | | | |
| | DDI | 2 Port configurable to HDMI1.4/DVI/Displayport1.2 HDMI up to 4096 x 2160@24Hz, DVI up to 1920 x 1200@60Hz, DP up to 4096 x 2304 @ 60Hz | | | | | | | | |
| Expansion | Multiple Display | Dual display, Triple display with each display combinations | | | | | | | | |
| | PCI Express x16 | 1 PCIe x16 configurable to 1 x16, 2 x8, 1 x8 + 2 x4 | | | | | | | | |
| | PCI Express x1 | 8 PCIe x1, configurable to x4 or x2 | | | | | | | | |
| | Audio Interface | Intel HD Audio Interface | | | | | | | | |
| | LPC | Yes | | | | | | | | |
| Serial Bus | SMBus | Yes | | | | | | | | |
| | I ² C Bus | Yes | | | | | | | | |
| Ethernet | Controller | Intel i219 | | | | | | | | |
| | Speed | 10/100/1000 Mbps | | | | | | | | |
| I/O | SATA | 4 SATAIII 6.0Gb/s | | | | | | | | |
| | USB3.0 | 4 Ports | | | | | | | | |
| | USB2.0 | 8 Ports | | | | | | | | |
| | SPI Bus | Yes | | | | | | | | |
| | GPIO | 8-bit | | | | | | | | |
| | Watchdog | 65536 level, 0-65535 sec | | | | | | | | |
| | COM Port | 2 Ports (2-wire) | | | | | | | | |
| | Express Card | 2 Ports | | | | | | | | |
| | TPM | Optional TPM2.0 (Infineon SLB9665) | | | | | | | | |
| | Smart Fan | 2 Ports; 1 port on COM module. Support 12V Fan, 1 port on carrier board | | | | | | | | |
| Power | Type | ATX: Vin, VSB; AT: Vin | | | | | | | | |
| | Supply Voltage | Vin: 8.5V (9V-5%) ~ 20V (19+5%); VSB: 5 +/-5%, RTC Battery: 2.0-3.3V | | | | | | | | |
| | Power Consumption | Max: (16GB DDR4 2133) i7-6820EQ +12V @ 43.3W Idle: (16GB DDR4 2133) i7-6820EQ +12V @ 5.23W *Only for reference and will depends on custom software loading, detail refer to user manual | | | | | | | | |
| Environment | Temperature | Operating Standard: 0 ~ 60° C (32 ~ 140° F), Extend: -40 ~ 85° C (-40 ~ 185° F) | | | | Storage -40 ~ 85° C (-40 ~ 185° F) | | | | |
| | Humidity | Operating: 40° C @ 95% relative humidity, non-condensing | | | | Storage: 60° C @ 95%relative humidity, non-condensing | | | | |
| | Vibration Resistance | 3.5 Grms | | | | | | | | |
| Mechanical | Dimensions | 125 x 95 mm (4.92" x 3.74") | | | | | | | | |

Block Diagram



Ordering Information

| Part No. | CPU | Freq. | Core | CPU TDP | LLC | DDR4 Memory | Thermal Solution | Operating Temperature |
|------------------|-------------|---------|------|---------|-----|-------------|------------------|-----------------------|
| SOM-5897C7-U8A2 | i7-6820EQ | 2.8 GHz | 4 | 45W | 8 | non-ECC | Active | 0 ~ 60 °C |
| SOM-5897C7-U0A2 | i7-6822EQ | 2.0 GHz | 4 | 25W | 8 | non-ECC | Active | 0 ~ 60 °C |
| SOM-5897C5-U7A2 | i5-6440EQ | 2.7 GHz | 4 | 45W | 6 | non-ECC | Active | 0 ~ 60 °C |
| SOM-5897C3-U7A2 | i3-6100E | 2.7 GHz | 2 | 35W | 3 | non-ECC | Active | 0 ~ 60 °C |
| SOM-5897C3-S9A2 | i3-6102E | 1.9 GHz | 2 | 25W | 3 | non-ECC | Active | 0 ~ 60 °C |
| SOM-5897CR-U4A2 | G3900E | 2.4 GHz | 2 | 35W | 2 | non-ECC | Active | 0 ~ 60 °C |
| SOM-5897E4C-U7A2 | E3-1505M V5 | 2.8 GHz | 4 | 45W | 8 | ECC | Active | 0 ~ 60 °C |
| SOM-5897E4C-U0A2 | E3-1505L V5 | 2.0 GHz | 4 | 25W | 8 | ECC | Active | 0 ~ 60 °C |
| SOM-5897C7X-U0A2 | i7-6822EQ | 2.0 GHz | 4 | 25W | 8 | non-ECC | Active | -40 ~ 85 °C |

Development Board

| Part No. | Description |
|------------------|--|
| SOM-DB5800-00A2E | COMe Devel. Board Type6 pint-out Rev. A2 |

Packing List

| Part No. | Description | Quantity |
|----------------|---------------------|----------|
| - | SOM-5897 CPU module | 1 |
| 1960073944N001 | Heatspreader | 1 |

Optional Accessories

| Part No. | Description |
|----------------|---|
| 1960048820N001 | Semi-Cooler 125 x 95 x 33 mm with 12V FAN |
| 1960094209T001 | QFCS 125 x 95 x 26.29 mm |

* Test conditions follow Advantech regulations and procedures.

* QFCS: Quadro Flow Cooling System

Embedded OS

| OS | Part No. | Description |
|----------------|------------|-------------------------------|
| Win10 IoT LTSB | 2070015177 | Img Win10 IoT Ent_LTSB 64 bit |

Tento produkt můžete zakoupit u společnosti AutoCont IPC a.s.



AutoCont IPC a.s.

Váš dodavatel průmyslových počítačů, komponent a speciálních průmyslových IT systémů.

 Uhlířská 1064/3, 710 00 Ostrava, Česká republika

 obchod@autocont-ipc.cz

 +420 552 301 002

 www.autocont-ipc.cz



PRŮMYSLOVÉ POČÍTAČE

fanless embedded PC, do racku, ...



POČÍTAČE S DISPLEJEM

panelové PC, terminály, do vozidel, ...



AUTOMATIZACE A SBĚR DAT

převodníky, karty, moduly, switche, ...



PERIFERIE A KOMPONENTY

monitory, klávesnice, desky, skříně, ...



NOTEBOOKY A TABLETY

odolné, windows, android, IP65, ...



INFORMAČNÍ KIOSKY

interiérové, venkovní, ...



MEDICÍNSKÁ TECHNIKA

počítače, tablety, LCD, klávesnice, ...



SOFTWAREVÁ ŘEŠENÍ

pro výrobu, zaměstnance, kiosky, ...



PŘEJÍT DO E-SHOPU

eshop.autocont-ipc.cz



DOPRAVA ZDARMA

Doprava zdarma v ČR a SR při objednávce nad 10 000 Kč bez DPH nebo nad 400 EUR.



PRODLOUŽENÁ ZÁRUKA

Záruka 2 roky na vyráběné počítače s možností jejího prodloužení až na 5 let.



ODMĚNA ZA VĚRNOST

Pravidelní zákazníci u nás nakupují za nižší ceny. Výše slevy se odvíjí od realizovaného obrátu.



SERVIS ON-SITE A IN-TIME

K projektovým dodávkám nabízíme rozšířenou podporu a servis s garancí výměny zařízení do 48 hodin.