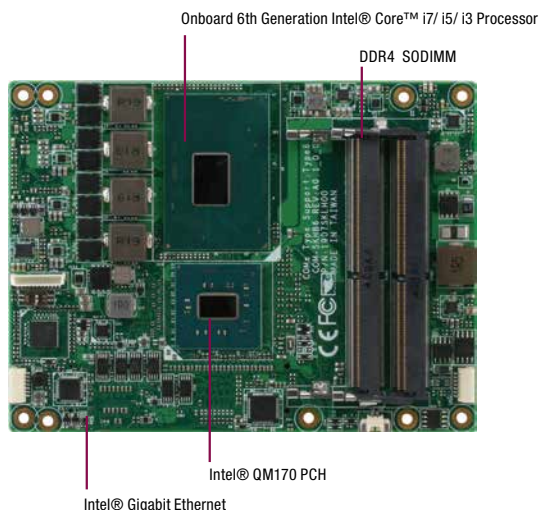


COM Express Type 6 Basic Size with 6th Gen Intel® Core™ i-series Processor

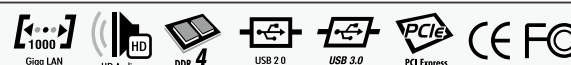


Features

- Intel® Core™ i3/i5/i7 Processor with PCH QM170/CM236
- DDR4 SODIMM x 2, up to 32 GB, ECC Support by SKU
- Gigabit Ethernet x 1
- 18/24-bit Dual Channel LVDS LCD/eDP, DDI x 2 (up to 3), VGA, High Definition Audio Interface
- SATA x 4
- USB 2.0 x 8, USB3.0 x 4, GPIO 8-bit, PCI-Express [x1] x 8, PCI-Express [x16] x 1
- COM Express Type 6 Basic Size 125mm x 95mm

Specifications

System	
Form Factor	COM Express Basic Size
CPU	i7-6820EQ 4c/2.7 GHz i3-6100E 2c/2.7 GHz
CPU Frequency	Up to i7-6820EQ 2.8 GHz
Chipset	PCH QM170 or CM236 (by sku)
Memory Type	DDR4, SODIMM x 2, ECC Support with CM236 sku only, up to 2133
Max. Memory Capacity	32GB
BIOS	AMI BIOS, Legacy Free
Wake on LAN	Yes
Watchdog Timer	255 levels
Power Requirement	Standard: +12V
Power Supply Type	AT/ATX Selection
Power Consumption (Typical)	Intel i7-6820EQ 2.8GHz, DDR4 16GB 3.08A@12V
Dimension (L x W)	4.92" x 3.75" (125mm x 95mm)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-4°F ~ 158°F (-20°C ~ 70°C)
Operating Humidity	10% ~ 90% relative humidity, non-condensing
MTBF (Hours)	80,000
Certification	CE/FCC Class A
Display	
VGA/LCD Controller	Onboard 6th Gen Intel® Core™ H-series Processor, GT2
Video Output	VGA, LVDS/eDP, DDI x2
I/O	
Ethernet	Intel® I219, Gigabit Ethernet
Audio	HD Audio
USB Port	USB2.0 x 8, USB3.0 x 4
Serial Port	2-Wire UART (Tx/Rx) x 2
HDD Interface	SATA x 4
Onboard SSD	—
Expansion Slot	PCIe[x16] x 1, PCIe[x1] x 8, I2C, LPC, SMBus
DIO	GPIO 8-bit
TPM	Optional



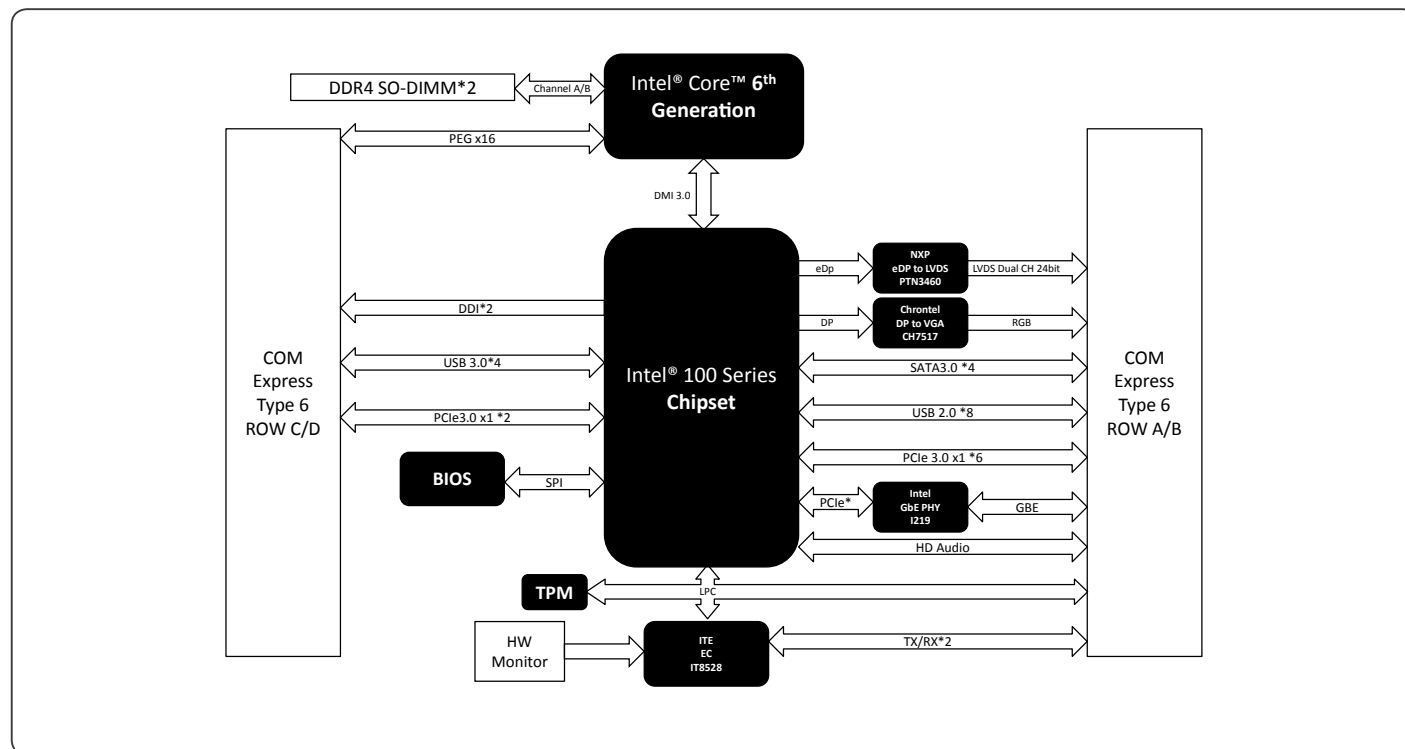
Packing List

- M2.5 Screw x 5
- Product CD
- COM-SKHB6

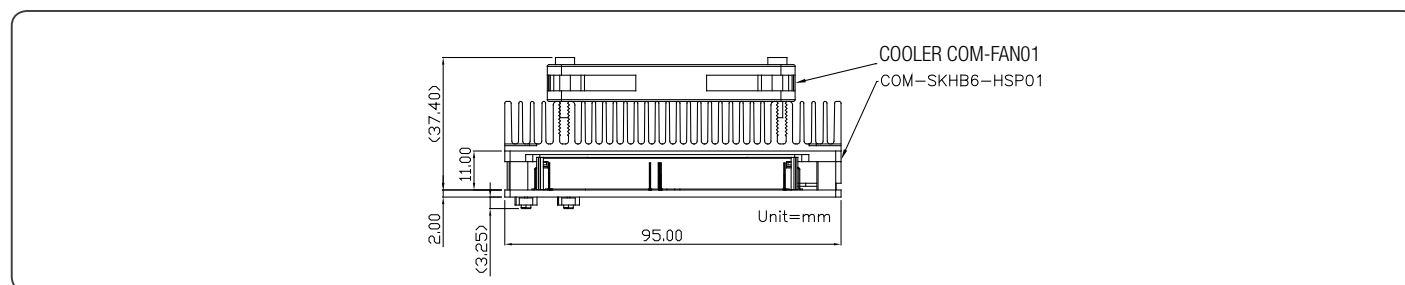
Optional Accessories

- **ECB-920A-A10-0001**
COM Express Type 1/6/10 Carrier Board, Gigabit Ethernet, USB, 2 COM, 4 SATA, PCIe, AT/ATX, Legacy Free, Rev. A1.0
- **COM-FAN01**
CPU Cooler, 125 x 95 x 26.4mm, Sliver, use with HSP
- **COM-SKHB6-HSP01**
Heat Spreader, For COM-SKHB6, Onboard CPU

Block Diagram Unit: mm



Dimension Unit: mm



Ordering Information

Part Number	Form Factor	CPU	Memory	Display	LVDS	Storage	LAN	USB	UART	Expansion	Power	Temperature	Other
COM-SKHB6-A10-0001	COM Express Type 6	i7-6820EQ, 2.8 GHz	DDR4 SODIMM x 2 (Max 32GB)	CRT, LVDS/ eDP, DDI x 2	24bit, 2CH	SATA x 4	GbE x 1	USB3.0 x 4, USB2.0 x 8	2-wire (Tx/Rx) x 2	PCIe[x1] x8, PCIe[x16] x 1	+12V (ATX)	0°C ~ 60°C	LPC, GPIO 8Bit, HDA, I2C, SMBus
COM-SKHB6-A10-0003	COM Express Type 6	i3-6100E, 2.7 GHz	DDR4 SODIMM x 2 (Max 32GB)	CRT, LVDS/ eDP, DDI x 2	24bit, 2CH	SATA x 4	GbE x 1	USB3.0 x 4, USB2.0 x 8	2-wire (Tx/Rx) x 2	PCIe[x1] x8, PCIe[x16] x 1	+12V (ATX)	0°C ~ 60°C	LPC, GPIO 8Bit, HDA, I2C, SMBus

CPU Support Chart

CPU	Base Frequency/ Turbo Boost GHz	Core/ Thread	Last level Cache	ECC Support/ Chipset	TDP	Graphic
E3-1505M v5	2.8/3.7	4/8	8M	Yes/CM236	45W/35W	GT2 - P530
E3-1505L v5	2/2.8	4/8	8M	Yes/CM236	25W	GT2 - P530
i7-6820EQ	2.8/3.5	4/8	8M	—	45W/35W	GT2 - P530
i7-6822EQ	2.0/2.8	4/8	8M	—	25W	GT2 - P530
i5-6440EQ	2.7/3.4	4/4	6M	—	45W/35W	GT2 - P530
i5-6442EQ	1.9/2.7	4/4	6M	—	25W	GT2 - P530

CPU	Base Frequency/ Turbo Boost GHz	Core/ Thread	Last level Cache	ECC Support/ Chipset	TDP	Graphic
i3-6100E	2.7	2/4	3M	Yes/CM236	35W	GT2 - P530
i3-6102E	1.9	2/4	3M	Yes/CM236	25W	GT2 - P530
C-G3900E	2.4	2/2	2M	—	35W	GT1 - 510
C-G3902E	1.6	2/2	2M	—	25W	GT1 - 510