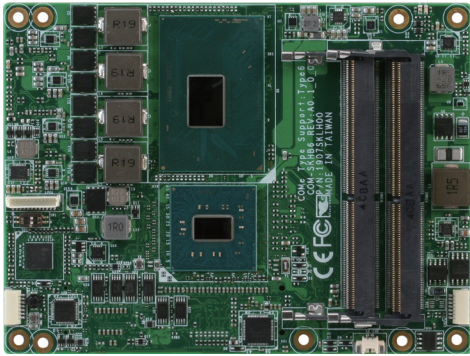


# COM-SKHB6

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 Supports by SKU
- Gigabit Ethernet x 1
- 18/24-bit Dual Channel LVDS LCD or eDP, DDI x 2 (up to 3), VGA
- High Definition Audio Interface
- SATA 3 x 4
- USB 2.0 x 8, USB 3.2 Gen 2 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	Onboard 6th Gen Intel® Core™ i-series Processor i7-6820EQ 4c/2.8 GHz i3-6100E 2c/2.7 GHz
CPU Frequency	Up to i7-6820EQ 3.50 GHz
Chipset	PCH QM170 or CM236 (by sku)
Memory Type	DDR4, SODIMM x 2, ECC Supports 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)	i7-6820EQ 2.8GHz, DDR4 16GB, 3.08A@12V (during full-loading mode)
Dimension (L x W)	4.92" x 3.75" (125 mm x 95 mm)
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	Intel® HD Graphics P530 / 530
Video Output	VGA, LVDS or eDP, DDI x 2 (3rd DDI could be added if VGA no required)
LVDS Interface	—
I/O	
Ethernet	Intel® I219, Gigabit Ethernet
Audio	HD Audio
USB Port	USB2.0 x 8, USB3.2 Gen 2 x 4
Serial Port	2-Wire UART (Tx/Rx) x 2
HDD Interface	SATA 3 x 4
Onboard Storage	—
Expansion Slot	PCIe[x16] x 1 PCIe[x1] x 8 I2C LPC SMBus
GPIO	GPIO 8-bit
TPM	Optional



## Packing List

- COM-SKHB6

## Optional Accessories

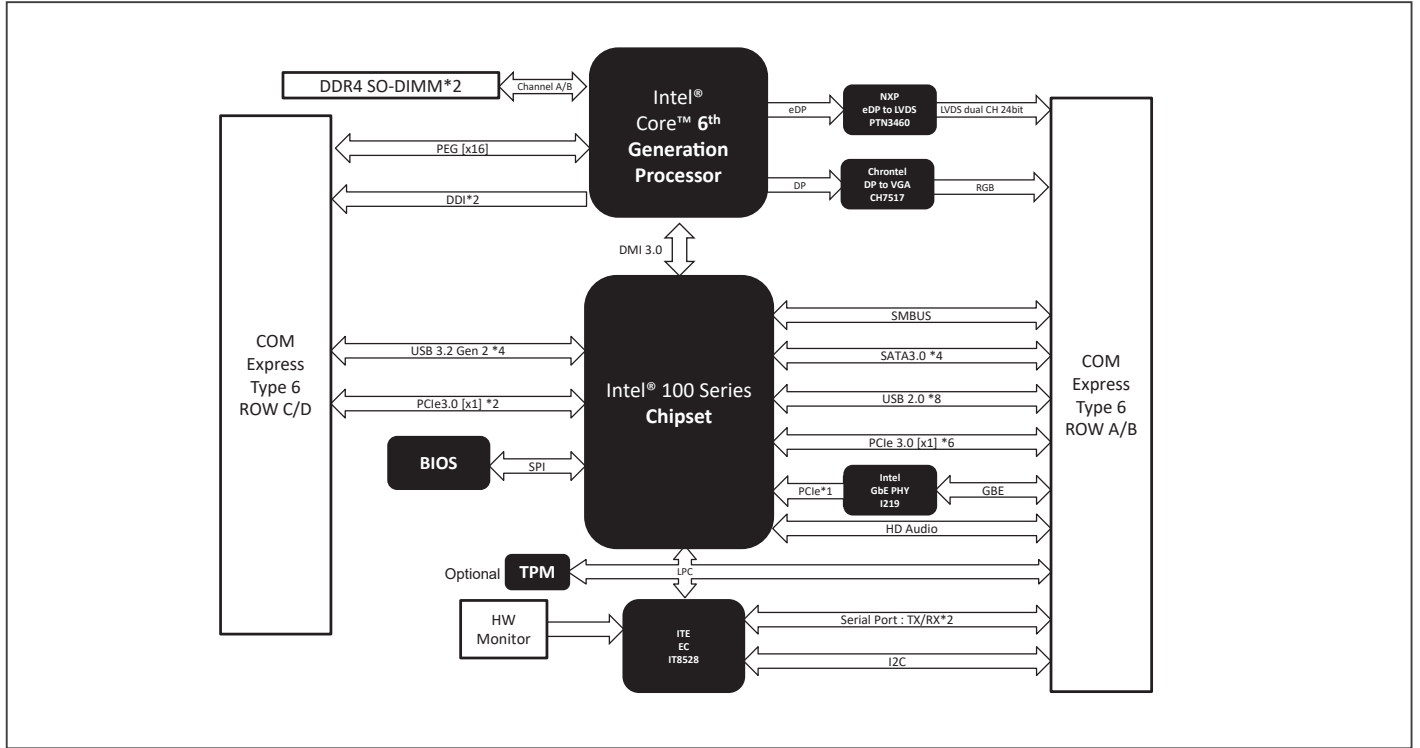
- **ECB-920A-A10-0001**  
COM Express Type 1/6/10 Carrier Board, Gigabit Ethernet, USB, 2 COM, 4 SATA, PCIe, AT/ATX, Legacy Free, Rev. A1.0
- **COM-FAN01**  
CPU Cooler, 125 x 95 x 26.4mm, Silver, use with HSP
- **COM-SKHB6-HSP01**  
Heat Spreader, For COM-SKHB6, Onboard CPU

## CPU Support Chart

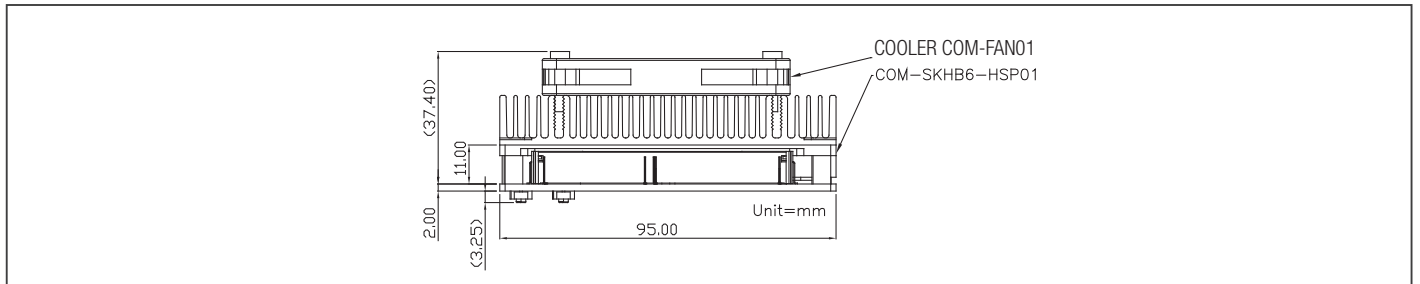
CPU	Core / Thread	Base Frequency	Max Turbo Frequency	Graphic
E3-1505M v5	4c/8t	2.8	3.7	Intel® HD Graphics P530
E3-1505L v5	4c/8t	2	2.8	Intel® HD Graphics P530
i7-6820EQ	4c/8t	2.8	3.5	Intel® HD Graphics 530
i7-6822EQ	4c/8t	2.0	2.8	Intel® HD Graphics 530
i5-6440EQ	4c/4t	2.7	3.4	Intel® HD Graphics 530
i5-6442EQ	4c/4t	1.9	2.7	Intel® HD Graphics 530
i3-6100E	2c/4t	2.7	—	Intel® HD Graphics 530
i3-6102E	2c/4t	1.9	—	Intel® HD Graphics 530
C-G3900E	2c/2t	2.4	—	Intel® HD Graphics 510
C-G3902E	2c/2t	1.6	—	Intel® HD Graphics 510

\* Also equivalent to 7-series CPU

### Block Diagram Unit: mm



### Dimension Unit: mm



### Ordering Information

Part Number	COM Express Type	CPU	Memory	Display	LVDS	Storage	LAN	USB	UART	Expansion	Power	Temperature	Other
COM-SKHB6-A10-0001	Type 6	i7-6820EQ	DDR4 SO-DIMM x 2	VGA, LVDS or eDP, DDI x2 (Up to 3)	18/24b 2CH (LVDS shared with eDP)	SATA 3 x 4	GbE x 1	USB 3.2 Gen 2 x 4 USB 2.0 x 8	2-Wire (Tx/Rx) x 2	PCIe[x16] x1, PCIe[x1] x8, I2C, LPC, SMBus	12V	0°C ~ 60°C	—
COM-SKHB6-A10-0003	Type 6	i3-6100E	DDR4 SO-DIMM x 2	VGA, LVDS or eDP, DDI x2 (Up to 3)	18/24b 2CH (LVDS shared with eDP)	SATA 3 x 4	GbE x 1	USB 3.2 Gen 2 x 4 USB 2.0 x 8	2-Wire (Tx/Rx) x 2	PCIe[x16] x1, PCIe[x1] x8, I2C, LPC, SMBus	12V	0°C ~ 60°C	—