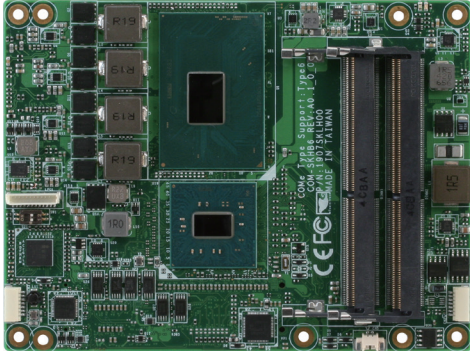


# COM-SKHB6

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



## Features

- 6th/7th Generation Intel® XEON / Core-H Series Processor (formerly Sky Lake-H / Kaby Lake-H)
- Intel Chipset QM170 / CM238
- 2x SODIMM DDR4 2133 Memory, up to 32 GB
- Intel i219LM Gigabit Ethernet x 1
- VGA, 18/24-bit 2ch LVDS/eDP, DDIx2 (Up to 3xDDI if VGA no required)
- High Definition Audio Interface
- SATA3.0 x 4
- USB2.0 x 8, USB3.2 Gen1 x 4
- PCIe [x16] x 1, PCIe[x1] x 8
- COM Express Type 6, Basic size, 125mm x 95mm



## Specifications

System	
Form Factor	COM Express Mini size, Type 6
CPU	Onboard 6th Gen Intel® Core™ i-series Processor
CPU Frequency	Up to i7-6820EQ 3.50 GHz
Chipset	PCH QM170 or CM236 (by sku)
Memory Type	DDR4, SODIMM x 2
Max. Memory Capacity	32GB
BIOS	AMI UEFI
Wake on LAN	Yes
Watchdog Timer	255 Levels
Power Requirement	+12 V and +5 VSB for ATX, +12V for AT
Power Supply Type	AT/ATX
Power Consumption (Typical)	3.08A@12V, full load, i7-6820EQ
Dimension (L x W)	4.92" x 3.75" (125mm x 95mm)
Operating Temperature	32 °F ~ 140 °F (0 °C ~ 60 °C)
Storage Temperature	-40°F ~ 185°F (-40°C ~ 85°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
Certification	CE/FCC Class A
Display	
Graphic Controller	Intel® HD Graphics P530 / 530
Video Output	3 Simultaneous Displays: 18/24-bit 2 Channel LVDS/eDP x 1 (Default: LVDS), DDI x 2 (Up to 3x DDI shared with VGA), VGA x 1
I/O	
Ethernet	Intel® i219 GbE x 1
Audio	High Definition Audio Interface
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
Expansion Slot	PCIe[x1] x 8 PCIe[x16] x 1 LPC SMBus I2C
GPIO	8-bit
Onboard Storage	—
TPM	TPM 2.0

## Packing List

- COM-SKHB6

## Optional Accessories

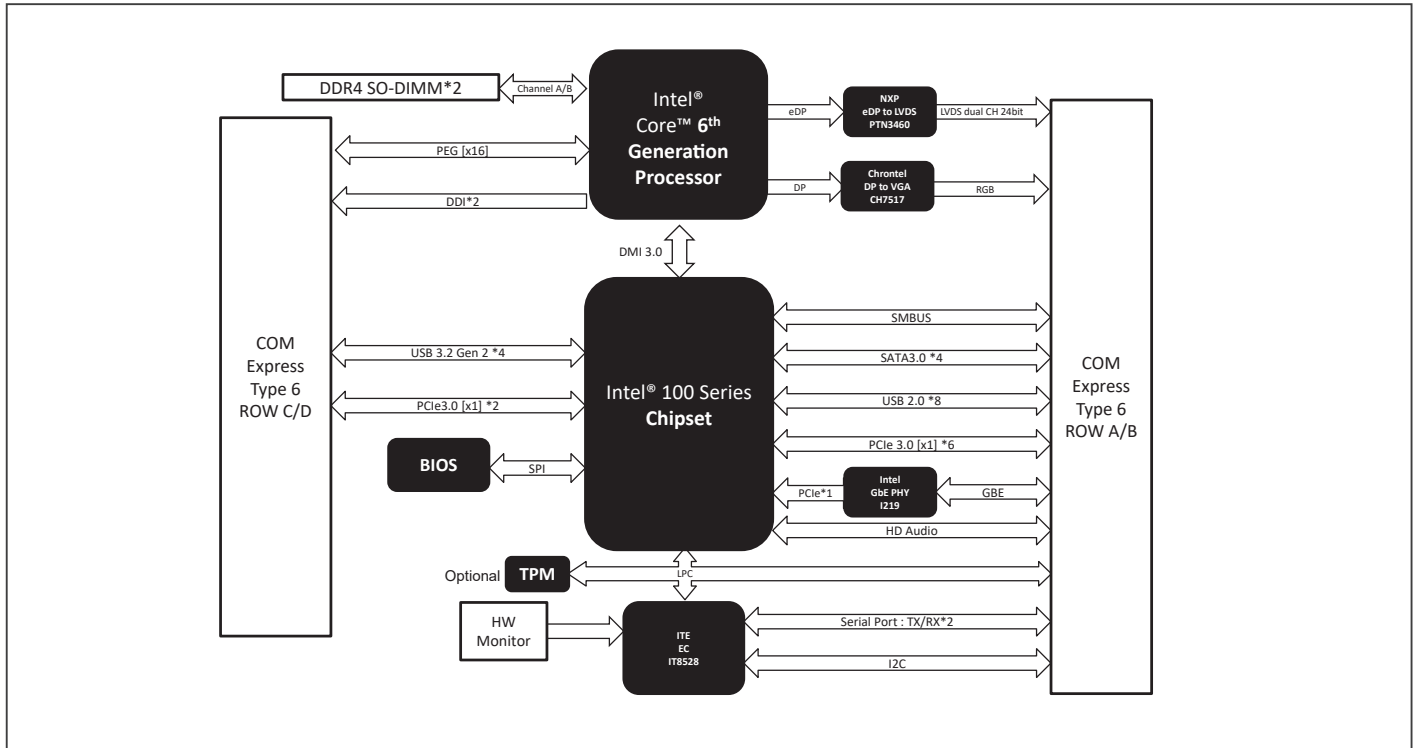
- ECB-920A-A11-0001**  
COM Express Type 1/6/10 Carrier Board, Gigabit Ethernet, USB, 2 COM, 4 SATA, PCIe, AT/ATX, Legacy Free, Rev. A1.0
- COM-SKHB6-FAN02**  
CPU Cooler, 125 x 95 x 36.6mm, Silver
- COM-SKHB6-HSP01**  
Heat Spreader, For COM-SKHB6, Onboard CPU

## CPU Support Chart

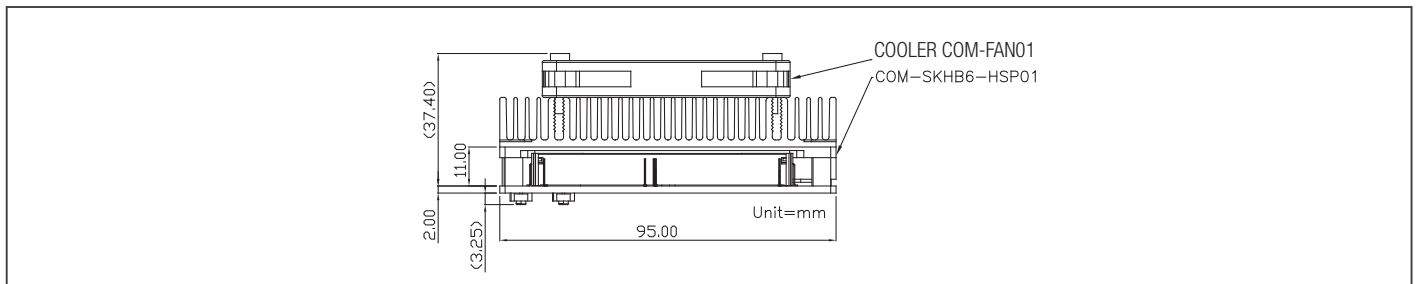
CPU	Core / Thread	Base Frequency	Max Turbo Frequency	Graphic
i7-6820EQ	4c/8t	2.8	3.5	Intel® HD Graphics 530
i7-6822EQ	4c/8t	2.0	2.8	Intel® HD Graphics 530
i5-6440EQ	4c/4t	2.7	3.4	Intel® HD Graphics 530
i3-6100E	2c/4t	2.8	—	Intel® HD Graphics 530
E3-1505Mv6	4c/8t	3.0	4.0	Intel® HD Graphics P630

\* 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-A13-0001	COM Express Basic Size, Type 6	I7-6820EQ	DDR4 SODIMM x 2	VGA, LVDS or eDP, DDI x2 (Up to 3)	18/24b 2CH (LVDS shared with eDP)	SATA 3 x 4	Intel® I219LM Gigabit Ethernet x 1	USB 2.0 x 8, USB3.2 Gen1 x 4	2-Wire UART(Tx/Rx) x2	PCIe[x16] x1, PCIe[x1] x 8	+12V	0°C ~ 60°C	LPC, SMBus, I2C
COM-SKHB6-A13-0002	COM Express Basic Size, Type 6	I5-6440EQ	DDR4 SODIMM x 2	VGA, LVDS or eDP, DDI x2 (Up to 3)	18/24b 2CH (LVDS shared with eDP)	SATA 3 x 4	Intel® I219LM Gigabit Ethernet x 1	USB 2.0 x 8, USB3.2 Gen1 x 4	2-Wire UART(Tx/Rx) x2	PCIe[x16] x1, PCIe[x1] x 8	+12V	0°C ~ 60°C	LPC, SMBus, I2C
COM-SKHB6-A13-0003	COM Express Basic Size, Type 6	I3-6100E	DDR4 SODIMM x 2	VGA, LVDS or eDP, DDI x2 (Up to 3)	18/24b 2CH (LVDS shared with eDP)	SATA 3 x 4	Intel® I219LM Gigabit Ethernet x 1	USB 2.0 x 8, USB3.2 Gen1 x 4	2-Wire UART(Tx/Rx) x2	PCIe[x16] x1, PCIe[x1] x 8	+12V	0°C ~ 60°C	LPC, SMBus, I2C
COM-SKHB6-A13-0004	COM Express Basic Size, Type 6	I7-6822EQ	DDR4 SODIMM x 2	VGA, LVDS or eDP, DDI x2 (Up to 3)	18/24b 2CH (LVDS shared with eDP)	SATA 3 x 4	Intel® I219LM Gigabit Ethernet x 1	USB 2.0 x 8, USB3.2 Gen1 x 4	2-Wire UART(Tx/Rx) x2	PCIe[x16] x1, PCIe[x1] x 8	+12V	0°C ~ 60°C	LPC, SMBus, I2C
COM-KBHB6-A13-0004	COM Express Basic Size, Type 6	E3-1505Mv6	DDR4 SODIMM x 2	VGA, LVDS or eDP, DDI x2 (Up to 3)	18/24b 2CH (LVDS shared with eDP)	SATA 3 x 4	Intel® I219LM Gigabit Ethernet x 1	USB 2.0 x 8, USB3.2 Gen1 x 4	2-Wire UART(Tx/Rx) x2	PCIe[x16] x1, PCIe[x1] x 8	+12V	0°C ~ 60°C	LPC, SMBus, I2C