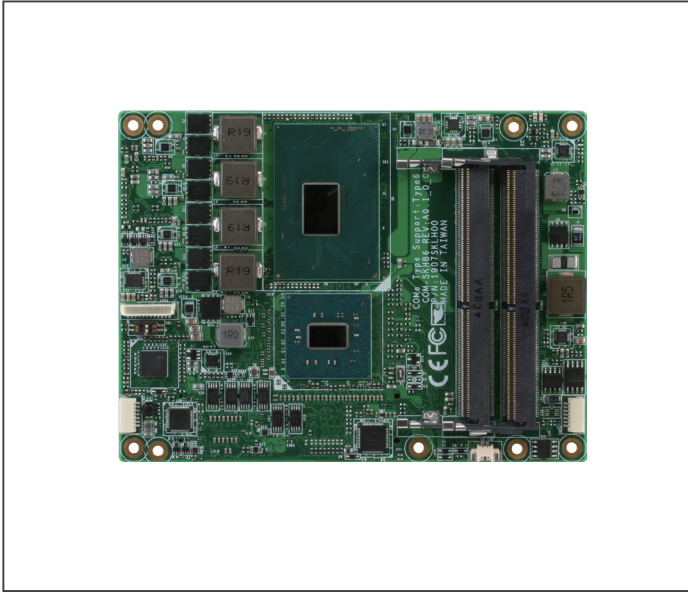


# COM-KBHB6

COM Express Type 6 Basic Size with 7th Gen. Intel® Xeon® E3 v6 Series Processors



## Features

- Intel® Xeon® E3-1505M v6 Processor with PCH CM238
- DDR4 SODIMM x 2, up to 32 GB, ECC Supports
- 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 7th Gen. Intel® XEON E3 v6 Series Processors, E3-1505M v6 4c/3.0 GHz
CPU Frequency	Up to E3-1505M v6, 4.0 GHz
Chipset	Intel® PCH CM238
Memory Type	DDR4, SO-DIMMx2, ECC support, up to 2400
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)	E3-1505M v6 3.0 GHz, DDR4 16GB, 3.7A@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 P630
Video Output	VGA, LVDS or eDP, DDI x2 (3rd DDI could be added if VGA no required)
LVDS Interface	—
I/O	
Ethernet	Intel® I219, Gigabit Ethernet
Audio	HD Audio
USB Port	USB 2.0 x 8, USB 3.2 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-KBHB6

## Optional Accessories

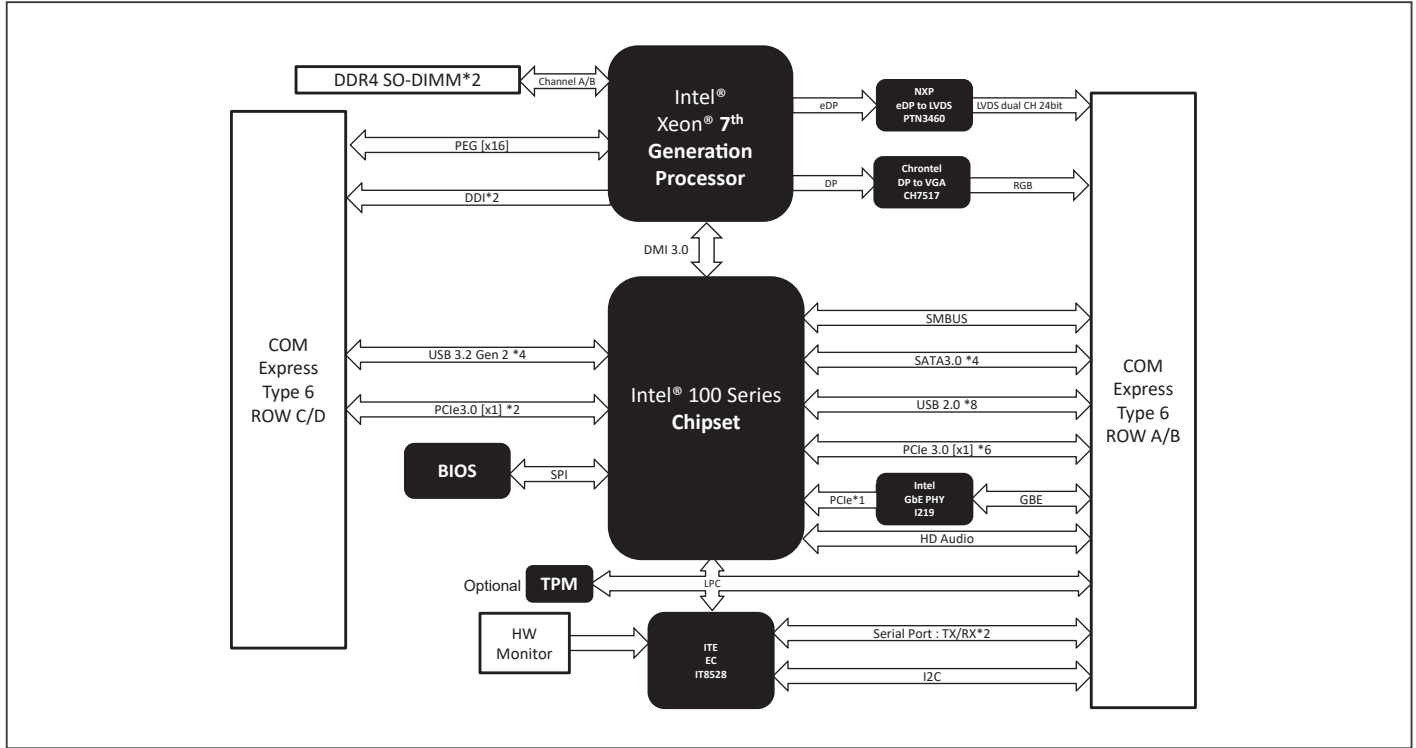
- **ECB-920A-A10-0001**  
COM Express Type 1/6/10 Carrier Board, Gigabit Ethernet, USB, 2 COM, 4 SATA, PCIe, AT/ATX, Legacy Free, Rev. A1.0
- **COM-FAN01**  
CPU Cooler, 125 x 95 x 26.4mm, Silver, use with HSP
- **COM-SKHB6-HSP01**  
Heat Spreader, For COM-SKHB6, Onboard CPU

## CPU Support Chart

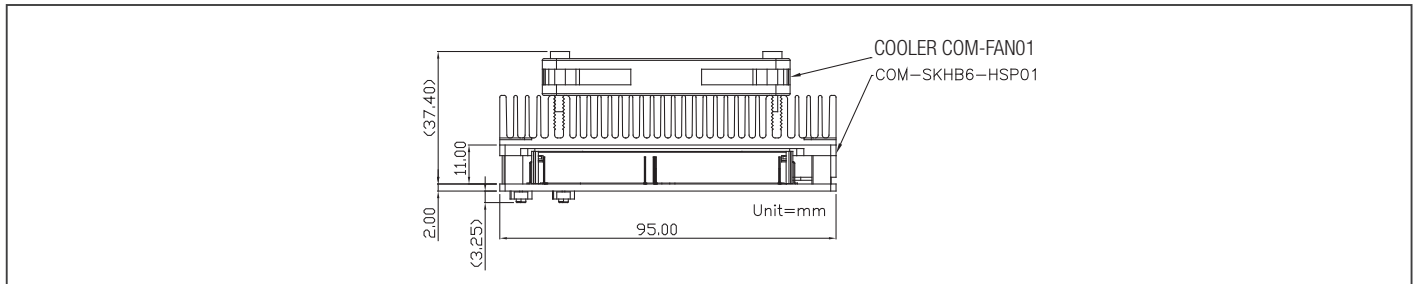
CPU	Core / Thread	Base Frequency	Max Turbo Frequency	Graphic
E3-1505M v6	4c/8t	3.0	4.0	Intel® HD Graphics P630
E3-1505L v6	4c/8t	2.2	3.0	Intel® HD Graphics P630
i7-7820EQ	4c/8t	3.0	3.7	Intel® HD Graphics 630
i5-7440EQ	4c/4t	2.9	3.6	Intel® HD Graphics 630
i5-7442EQ	4c/4t	2.1	2.9	Intel® HD Graphics 630
i3-7100E	2c/4t	2.9	—	Intel® HD Graphics 630
i3-7102E	2c/4t	2.1	—	Intel® HD Graphics 630

\* 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-KBHB6-A10-0004	Type 6	E3-1505M v6	DDR4 SO-DIMM x2 (ECC Support)	VGA, LVDS or eDP, DDI x 2 (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	—