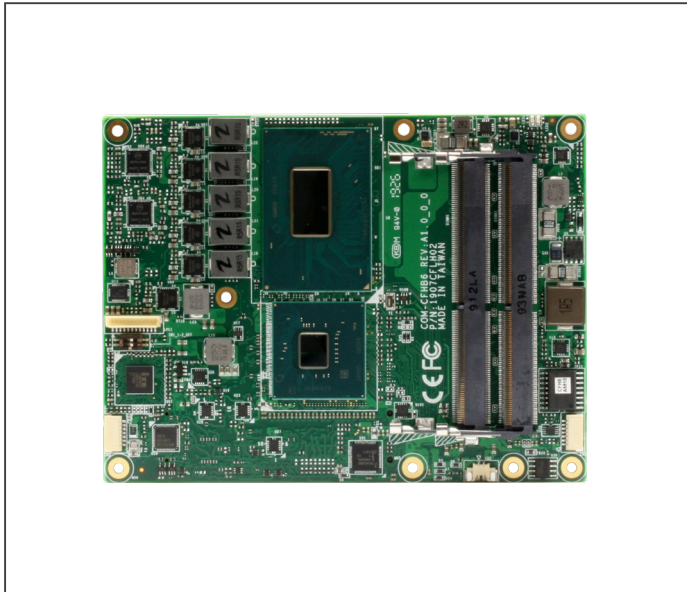


# COM-CFHB6

COM Express Type 6 Basic Size with 8th/9th Generation Intel® Core™ H-Series / Xeon™ Processors



## Specifications

System	
Form Factor	COM Express Basic Size, Type 6
CPU	8th/9th Gen Intel® Core™/ Xeon™-E Series Processor
CPU Frequency	Up to E-2276ME (2.8 GHz)
Chipset	Intel® QM370/CM246 PCH
Memory Type	SODIMM DDR4 2666 Socket x 3
Max. Memory Capacity	up to 64 GB, ECC Support (only with CM246 PCH)
BIOS	AMI BIOS, Legacy free BIOS
Wake on LAN	Yes
Watchdog Timer	255 Levels
Power Requirement	Standard: +12V
Power Supply Type	AT/ATX Selection
Power Consumption (Typical)	Intel® Xeon® E-2276ME CPU, 12V@4.65A, Full load: 55.8W
Dimension (L x W)	4.92" x 3.75" (125mm x 95mm)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C) -40°F ~ 185°F (-40°C ~ 85°C) optional
Storage Temperature	-40°F ~ 185°F (-40°C ~ 85°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	464,349 Hours
Certification	CE/FCC Class A
Display	
VGA/LCD Controller	Intel® GT2-P630 (Xeon series)/ GT2-630 (Core I series)
Video Output	VGA, 18/24b 2ch LVDS/eDP, DDI x 2 (3rd one can be added if VGA not require)
LVDS Interface	18/24b 2ch LVDS
I/O	
Ethernet	Intel® Ethernet I219 GbE x1
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	SATA3 x 4
Onboard Storage	—
Expansion	PCIe[x1] x 1, PCIe[x16] x 1, I2C, LPC, SMBus
GPIO	8-bit
TPM	2.0(Optional)

## Features

- 8th / 9th Generation Intel® Core™ i3/i5/i7/ Xeon-E Processors
- 3x SODIMM DDR4 2666 Memory up to 64GB, ECC support (by SKU, with CM246 PCH)
- Intel I219 Gigabit Ethernet
- VGA, 18/24-bit 2ch LVDS or 4-lane eDP, DDI up to 3
- High Definition Audio Interface
- SATA x 4, USB2.0 x 8, USB 3.2 Gen 2 X 4
- PCI-Express [x1] x 8, PCI-Express[x16] x1
- GPIO x 8, SMBus, I2C, LPC
- COM Express Basic Size, Pin-Out Type 6, 125mmx95mm



## Packing List

- COM-CFHB6 x 1

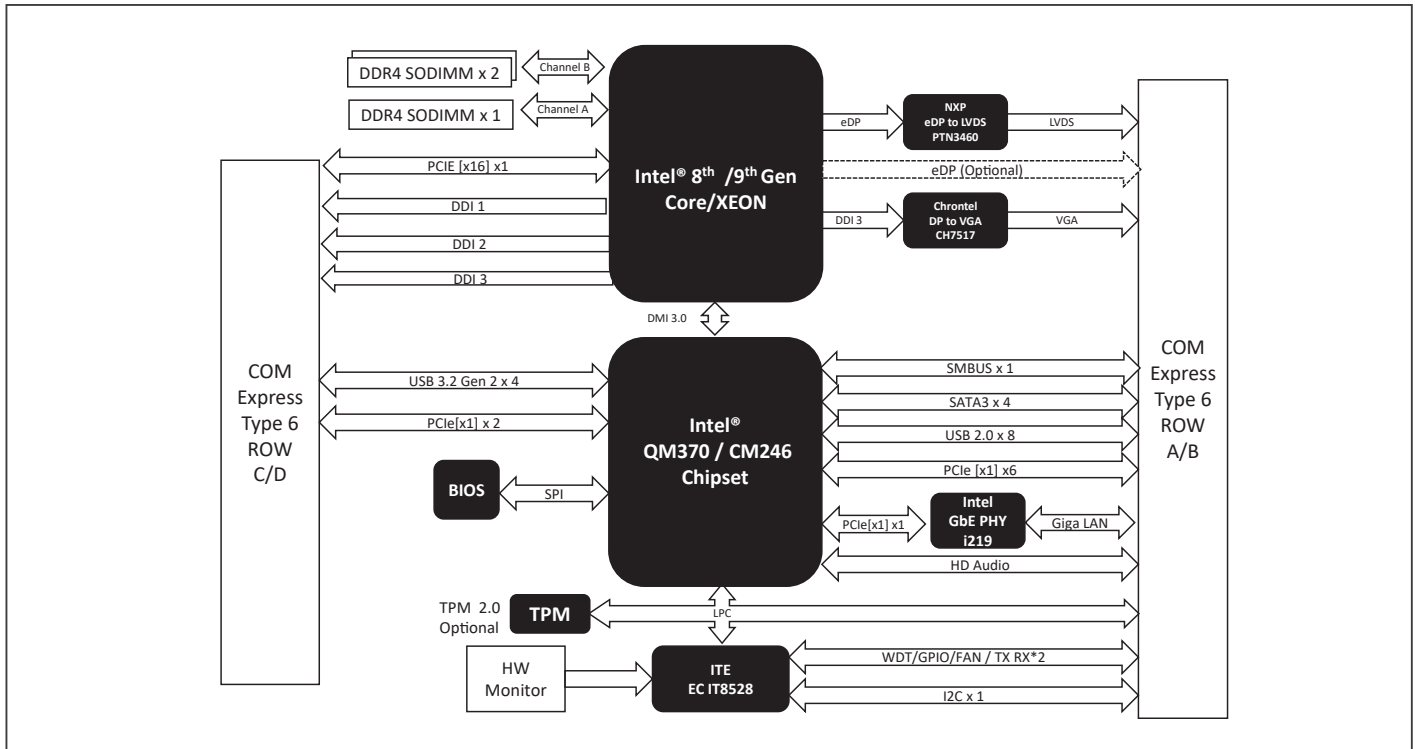
## Optional Accessories

- **ECB-920A-A11-0001**  
COMe Type 6/10, Carrier Board, ATX, 2.5GbE, 8USB, 2COM, 4SATA, PCIe, AT/ATX, Rev. A1.1
- **COM-CFHB6-FAN01**  
CPU Cooler, Fan+Heat Sink, 125\*95\*41.55mm for COM-CFHB6
- **COM-CFHB6-HSP01**  
Heat Spreader, 125\*95, Black, COM-CFHB6
- **COM-FAN01**  
CPU Cooler, 125\*95, Silver, use w/HSP

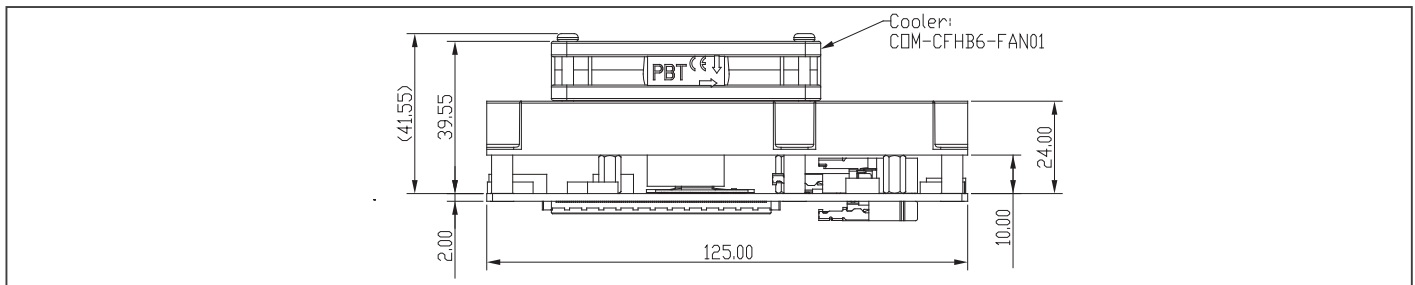
## CPU Support Chart

CPU	Core/Thread	Base Frequency/ Turbo	TDP	ECC Support	Graphic	Chipset
XEON E-2176M	6c/12t	2.7GHz/4.4GHz	12M	V	GT2-P630	CM246
i7-8850H	6c/12t	2.6GHz/4.3GHz	9M	X	GT2-630	QM370
i5-8400H	4c/8t	2.5GHz/4.2GHz	8M	X	GT2-630	QM370
i3-8100H	4c/4t	3.0GHz	6M	X	GT2-630	QM370
XEON E-2276ME	6c/12t	2.8GHz/4.5GHz	12M	V	GT2-P630	CM246
XEON E-2276ML	6c/12t	2.0GHz/4.2GHz	12M	V	GT2-P630	CM246
XEON E-2254ME	4c/8t	2.6GHz/3.8GHz	8M	v	GT2-P630	CM246
XEON E-2254ML	4c/8t	1.7GHz/3.5GHz	8M	V	GT2-P630	CM246
i7-9850HE	6c/12t	2.7GHz/4.4GHz	9M	X	GT2-630	QM370
i7-9850HL	6c/12t	1.9GHz/4.1GHz	9M	X	GT2-630	QM370
i3-9100HL	4c/4t	3.0GHz	6M	X	GT2-630	QM370

## 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-CFHB6-A11-0001	Type 6 (COM.0 Rev. 3.0)	Xeon E-2176M	DDR4 SODIMM x 3	VGA, DDI x 2 (up to 3)	18/24b 2ch LVDS/eDP	SATA3 x 4	GbE x 1	USB 3.2 Gen 2 x 4 USB 2.0 x 8	2-wire (Tx/Rx) x 2	PCIe [x1] x 8 PCIe[x16] x 1	+12V	0°C ~ 60°C	LPC, SMBus, I2C
COM-CFHB6-A11-0002	Type 6 (COM.0 Rev. 3.0)	I7-8850H	DDR4 SODIMM x 3	VGA, DDI x 2 (up to 3)	18/24b 2ch LVDS/eDP	SATA3 x 4	GbE x 1	USB 3.2 Gen 2 x 4 USB 2.0 x 8	2-wire (Tx/Rx) x 2	PCIe [x1] x 8 PCIe[x16] x 1	+12V	0°C ~ 60°C	LPC, SMBus, I2C
COM-CFHB6-A11-0005	Type 6 (COM.0 Rev. 3.0)	Xeon E-2276ME	DDR4 SODIMM x 3	VGA, DDI x 2 (up to 3)	18/24b 2ch LVDS/eDP	SATA3 x 4	GbE x 1	USB 3.2 Gen 2 x 4 USB 2.0 x 8	2-wire (Tx/Rx) x 2	PCIe [x1] x 8 PCIe[x16] x 1	+12V	0°C ~ 60°C	LPC, SMBus, I2C