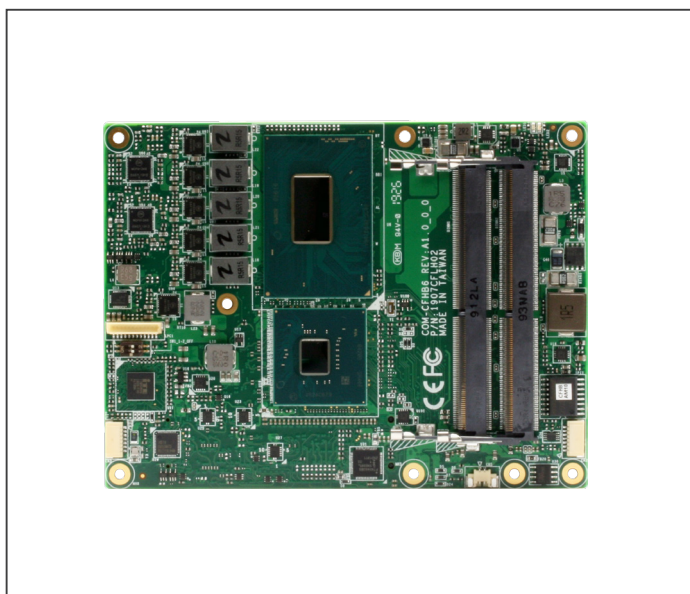




COM Express Type 6 Basic Size with 8th/9th Gen Intel® Core™/Xeon® E Processors



## Features

- DDR4 2666MHz SODIMM x 3, up to 96GB (ECC by SKU)
- VGA x 1, LVDS x 1, DDI x 2
- USB 2.0 x 8, USB 3.2 Gen 2 x 4
- PCIe [x1] x 8, PCIe [x16] x 1
- Intel® I219-LM GbE x 1
- COM Express Type 6, 4.92" x 3.75" (125mm x 95mm)



## Specifications

System	
Form Factor	COM Express Basic Size, Type 6
CPU	9th Generation Intel® Core™ Processors: Intel® Core™ i7-9850HL (6C/12T, 1.90 GHz, 25W) Intel® Core™ i7-9850HE (6C/12T, 2.70 GHz, 45W)
	8th Generation Intel® Core™ Processors: Intel® Core™ i7-8850H (6C/12T, 2.60 GHz, 45W) Intel® Core™ i5-8400H (4C/8T, 2.50 GHz, 45W) Intel® Core™ i3-8100H (4C/4T, 3.00 GHz, 45W)
	Intel® Xeon® E Processors: Intel® Xeon® E-2176M (6C/12T, 2.70 GHz, 45W) Intel® Xeon® E-2276ME Processor (6C/12T, 2.80 GHz, 45W)
Chipset	Intel® QM370 Intel® CM246
Memory	DDR4 2666MHz SODIMM x 3, up to 96GB (ECC by SKU)
Onboard Storage	—
BIOS	AMI UEFI
Wake on LAN	Yes
Watchdog Timer	255 Levels
Dimension	4.92" x 3.75" (125mm x 95mm)
Security	TPM 2.0 (Optional)
Power	
Power Requirement	+12V and +5VSB for ATX, +12V for AT
Power Type	AT/ATX
Power Consumption (Typical)	Intel® Xeon® E-2276ME, 4.65A @+12V
Display	
Graphics Controller	Intel® UHD Graphics 630 Intel® UHD Graphics P630
Video Output	3 Simultaneous Displays: 18/24-bit Single/Dual-Channel LVDS x 1, up to 1920 x 1080 DDI x 2, up to 3840 x 2160 VGA x 1, up to 1920 x 1080

I/O	
Ethernet	Intel® I219-LM GbE x 1
Audio	High Definition Audio Interface
USB Port	USB 2.0 x 8, USB 3.2 Gen 2 x 4
Serial Port	2-Wire UART x 2 (Tx/Rx)
HDD Interface	SATA III x 4
Expansion	PEG 3.0 [x16] x 1
	PCIe 3.0 [x1] x 8 LPC x 1
GPIO	8-bit
SMBus/I2C	I2C x 1, SMBus x 1
Environment	
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
EMC	CE/FCC Class A
OS Support	Windows® 10 (64-bit) Linux Ubuntu 18.04.3/Kernel 5.0
Weight	0.44 lb. (0.20Kg)

## Packing List

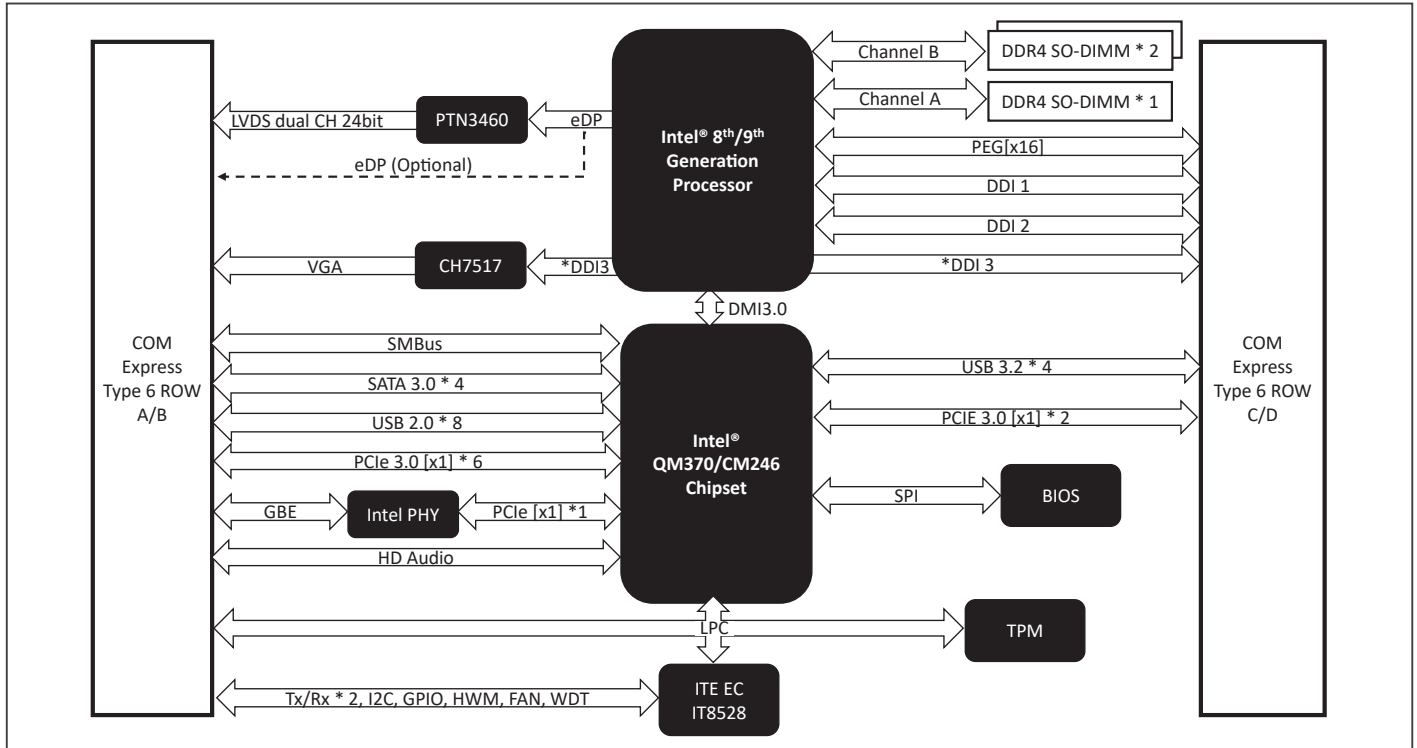
- COM-CFHB6

## Optional Accessories

Part Number	Description
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	Cooler. 125mm x 95mm x 42mm. 3pin. for COM-CFHB6
COM-CFHB6-HSP01	Heat Spreader. 125mm x 95mm x 11mm. Black

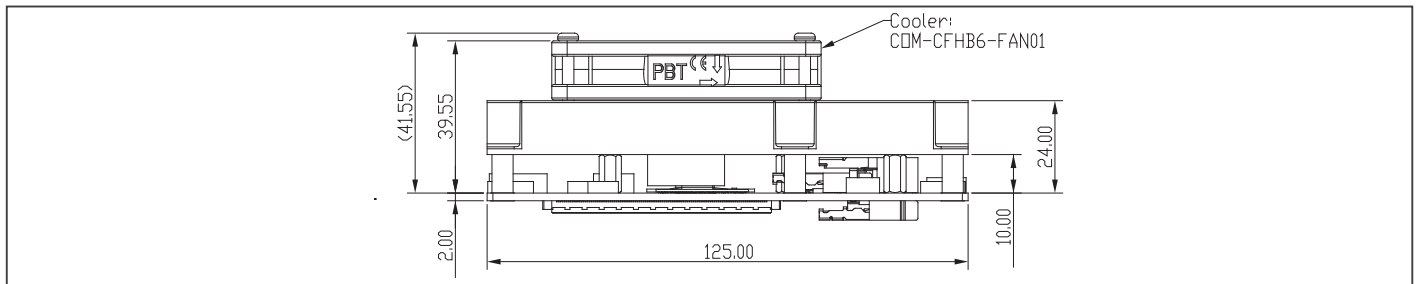


## Block Diagram



## Dimension

Unit: mm



## Ordering Information

Part Number	COM Express Type	CPU	Memory	ECC support	Display	Storage	LAN	USB	UART	Expansion	Power	Temperature	Others
COM-CFHB6-A11-0001	Type 6	Intel® Xeon® E-2176M	DDR4 SODIMM x 3	Yes	VGA x 1, DDI x 2	SATA III x 4	Intel® I219-LM x 1	USB 3.2 Gen 2 x 4 USB 2.0 x 8	2-Wire UART x 2 (Tx/Rx)	PCle [x1] x 6 PEG [x16] x 1	12V	0°C ~ 60°C	LPC, GPIO 8-bit, I2C, SMBus, SPI
COM-CFHB6-A11-0002	Type 6	Intel® Core™ i7-8850H	DDR4 SODIMM x 3	—	VGA x 1, DDI x 2	SATA III x 4	Intel® I219-LM x 1	USB 3.2 Gen 2 x 4 USB 2.0 x 8	2-Wire UART x 2 (Tx/Rx)	PCle [x1] x 6 PEG [x16] x 1	12V	0°C ~ 60°C	LPC, GPIO 8-bit, I2C, SMBus, SPI
COM-CFHB6-A11-0003	Type 6	Intel® Core™ i5-8400H	DDR4 SODIMM x 3	—	VGA x 1, DDI x 2	SATA III x 4	Intel® I219-LM x 1	USB 3.2 Gen 2 x 4 USB 2.0 x 8	2-Wire UART x 2 (Tx/Rx)	PCle [x1] x 6 PEG [x16] x 1	12V	0°C ~ 60°C	LPC, GPIO 8-bit, I2C, SMBus, SPI
COM-CFHB6-A11-0004	Type 6	Intel® Core™ i3-8100H	DDR4 SODIMM x 3	Yes	VGA x 1, DDI x 2	SATA III x 4	Intel® I219-LM x 1	USB 3.2 Gen 2 x 4 USB 2.0 x 8	2-Wire UART x 2 (Tx/Rx)	PCle [x1] x 6 PEG [x16] x 1	12V	0°C ~ 60°C	LPC, GPIO 8-bit, I2C, SMBus, SPI
COM-CFHB6-A11-0005	Type 6	Intel® Xeon® E-2276ME	DDR4 SODIMM x 3	Yes	VGA x 1, DDI x 2	SATA III x 4	Intel® I219-LM x 1	USB 3.2 Gen 2 x 4 USB 2.0 x 8	2-Wire UART x 2 (Tx/Rx)	PCle [x1] x 6 PEG [x16] x 1	12V	0°C ~ 60°C	LPC, GPIO 8-bit, I2C, SMBus, SPI
COM-CFHB6-A11-0006	Type 6	Intel® Xeon® E-2276ML	DDR4 SODIMM x 3	Yes	VGA x 1, DDI x 2	SATA III x 4	Intel® I219-LM x 1	USB 3.2 Gen 2 x 4 USB 2.0 x 8	2-Wire UART x 2 (Tx/Rx)	PCle [x1] x 6 PEG [x16] x 1	12V	0°C ~ 60°C	LPC, GPIO 8-bit, I2C, SMBus, SPI
COM-CFHB6-A11-0007	Type 6	Intel® Core™ i7-9850HE	DDR4 SODIMM x 3	—	VGA x 1, DDI x 2	SATA III x 4	Intel® I219-LM x 1	USB 3.2 Gen 2 x 4 USB 2.0 x 8	2-Wire UART x 2 (Tx/Rx)	PCle [x1] x 6 PEG [x16] x 1	12V	0°C ~ 60°C	LPC, GPIO 8-bit, I2C, SMBus, SPI
COM-CFHB6-A11-0008	Type 6	Intel® Core™ i7-9850HL	DDR4 SODIMM x 3	—	VGA x 1, DDI x 2	SATA III x 4	Intel® I219-LM x 1	USB 3.2 Gen 2 x 4 USB 2.0 x 8	2-Wire UART x 2 (Tx/Rx)	PCle [x1] x 6 PEG [x16] x 1	12V	0°C ~ 60°C	LPC, GPIO 8-bit, I2C, SMBus, SPI