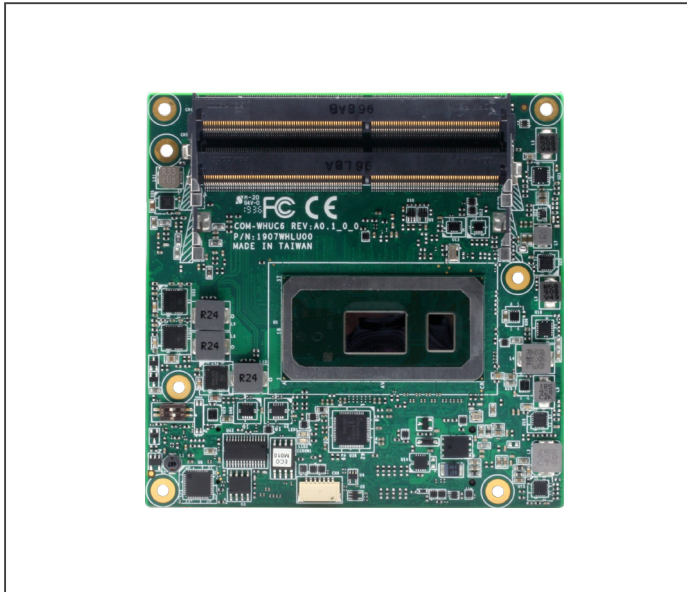


# COM-WHUC6

COM Express Compact Type 6 with 8th Gen Intel® Core™ ULT SoC



## Specifications

System	
Form Factor	COM Express Compact size, 95mm x 95mm
CPU	8th Generation Intel® Core™ ULT Series Processor
CPU Frequency	—
Chipset	Onboard 8th Generation Intel® Core™ SoC
Memory Type	SO-DIMM DDR4 2400 Socket x2
Max. Memory Capacity	Up to 64GB
BIOS	AMI BIOS, Legacy free BIOS
Wake on LAN	Yes
Watchdog Timer	255 Levels
Power Requirement	Standard: +12V
Power Supply Type	AT/ ATX Mode
Power Consumption (Typical)	12W, estimate 18W with i7-8655UE @ 100% loading
Dimension (L x W)	3.75" x 3.75" (95mm x 95mm)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-4°F ~ 158°F (-20°C ~ 70°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	TBD
Certification	CE/FCC Class A
Display	
VGA/LCD Controller	Intel® UHD Graphics 620 / 610
Video Output	DDIO: LVDS, (eDP by BOM change) DDI1: Display Port DDI2: Default VGA, (DP by SW1&2 selected)
LVDS Interface	Support 18-bit and 24-bit dual channel
I/O	
Ethernet	Intel® I219 GbE x 1
Audio	HD Audio x 1
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	SATA3 x 2 as default (up to 3)
Onboard Storage	eMMC x 1 (up to 64GB)
Expansion Slot	PCIe[x1] x 4 + PCIe[x4] x 1 (default), I2C, LPC, SMBus
GPIO	8-bit
TPM	TPM 2.0 Optional

## Features

- 8th Generation Intel® Core™/Celeron™ ULT Processor
- DDR4 socket x 2, non-ECC Support
- Gigabit Ethernet x 1
- VGA, 18/24b 2ch LVDS LCDs or eDP, DDIx2 (DDI2 share with VGA)
- High Definition Audio Interface
- SATA3 x 2, eMMC onboard (up to 64GB)
- USB 3.2 Gen 2 x 4, USB2.0 x 8
- PCI-Express [x1] x 8 lanes available, 5 Devices max.
- GPIO x8, SMBus, I2C, LPC
- COM Express Type 6, Compact size, 95mm x 95mm



## Packing List

- COM-WHUC6

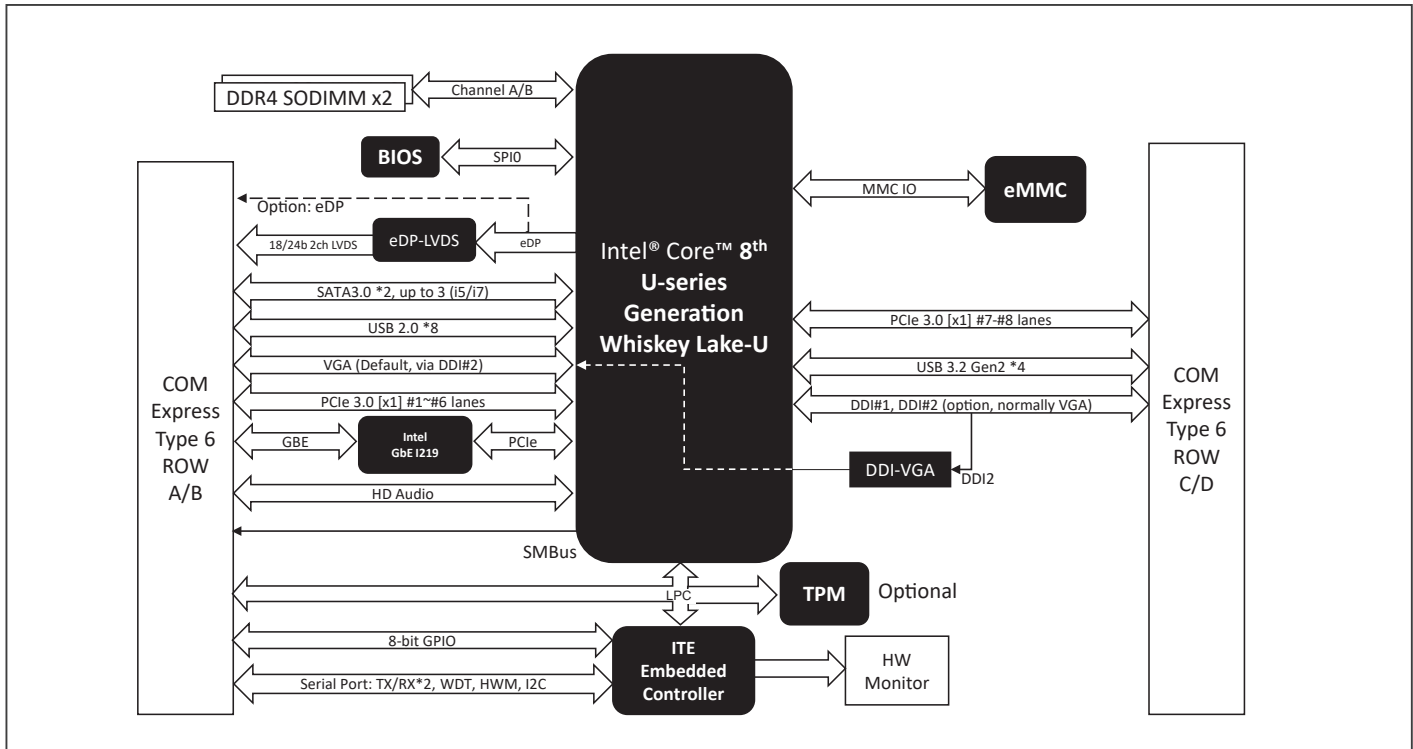
## Optional Accessories

- **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-WHUC6-HSP01**  
Heat Spreader, 95 x 95 x 11mm, Black, COM-WHUC6
- **COM-WHUC6-FAN01**  
CPU Cooler, 95 x 95 x 36mm, Silver, FAN + Heat Sink for COM-WHUC6
- **COM-FAN02**  
CPU Cooler, 95 x 95 x 26.5mm, Silver, use w/HSP

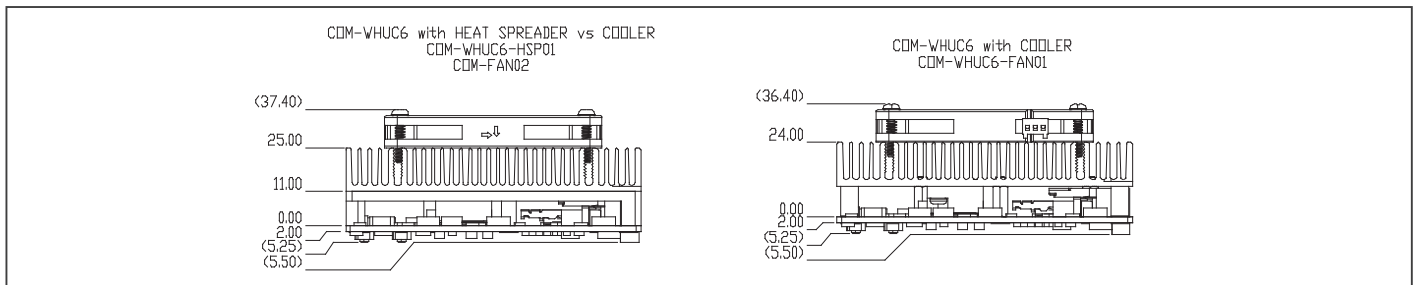
## CPU Support Chart

CPU	Core / Thread	Base Frequency	Max Turbo Frequency	Graphic
i7-8665UE	4c / 8t	1.7 GHz	4.4 GHz	Intel® UHD Graphics 620
i5-8365UE	4c / 8t	1.6 GHz	4.1 GHz	Intel® UHD Graphics 620
i3-8145UE	2c / 4t	2.20 GHz	3.90 GHz	Intel® UHD Graphics 620
Celeron 4305UE	2c / 2t	2.00 GHz	2.00 GHz	Intel® UHD Graphics 610

## 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-WHUC6-A10-0001	Type 6	i7-8665UE	DDR4 SO-DIMM x 2	VGA, DDI x2, LVDS or eDP	18/24b 2ch LVDS or eDP	SATA 3 x 2 eMMC x 1 (64 GB)	GbE x 1	USB 2.0 x 8 USB 3.2 Gen 2 x 4	2-Wire (Tx/Rx) x 2	PCIe[x1] x 4 + PCIe[x4] x 1 (default), I2C x1, LPC x 1, SMBUS x 1	+12V	0°C - 60°C	—
COM-WHUC6-A10-0003	Type 6	i3-8145UE	DDR4 SO-DIMM x 2	VGA, DDI x2, LVDS or eDP	18/24b 2ch LVDS or eDP	SATA 3 x 2 eMMC x 1 (64 GB)	GbE x 1	USB 2.0 x 8 USB 3.2 Gen 2 x 4	2-Wire (Tx/Rx) x 2	PCIe[x1] x 4 + PCIe[x4] x 1 (default), I2C x1, LPC x 1, SMBUS x 1	+12V	0°C - 60°C	—