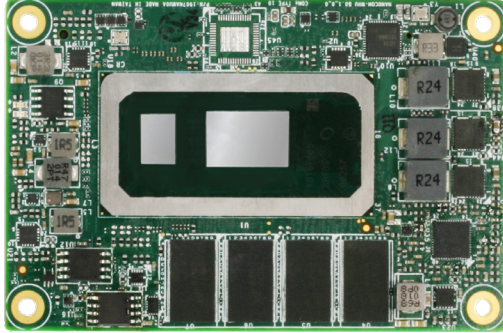


NanoCOM-WHU Rev.B

COM Express Type 10 with 8th Generation Intel® Core™ U Series Processor



Features

- 8th Generation Intel® Core™/Celeron™ U Series Processor (formerly Whiskey Lake)
- Onboard Memory DDR4 2400, up to 8GB
- Intel I219LM Gigabit Ethernet x 1
- 18/24-bit Single-Channel LVDS LCDs/eDP x 1 , DDI x 1
- High Definition Audio Interface
- SATA3 x 2
- USB 3.2 Gen 2 x 2, USB2.0 x 8
- PCIe [x1] x 4
- COM Express Mini Size, Type 10, COM.0 R3.0



Specifications

System	
Form Factor	COM Express Mini size, Type 10
CPU	8th Generation Intel® Core™/Celeron™ U Series Processor
CPU Frequency	Up to i7-8665UE, 1.70GHz
Chipset	8th Generation Intel® Core™/Celeron™ U Series SoC
Memory Type	Onboard DDR4-2133
Max. Memory Capacity	Up to 8GB
BIOS	AMI BIOS, Legacy free
Wake on LAN	Yes
Watchdog Timer	255 Levels
Power Requirement	Standard : +12V
Power Supply Type	AT/ATX
Power Consumption (Typical)	12V@3.38A, full load, i7-8665UE (Max Current) 12V@2.10A, full load, i7-8665UE (Balance Current)
Dimension (L x W)	3.31" x 2.17" (84mm x 55mm)
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)	660,756
Certification	CE/FCC Class A
Display	
VGA/LCD Controller	Intel® UHD Graphics 620/610
Video Output	Dual Display : LVDS LCD/eDP, DDI x 1 Single Channel LVDS (18/24 bit)
I/O	
Ethernet	Intel® I219LM GbE x 1
Audio	High Definition Audio Interface
USB port	USB 2.0 x 8, USB 3.2 Gen 2 x 2
Serial Port	2Wire UART(Tx/Rx) x 2
HDD Interface	SATA 3 x 2
Expansion	PCIe [x1] x 4 LPC SMBus I2C
GPIO	8 bit
Onboard Storage	—
TPM	fTPM

Packing List

- NanoCOM-WHU Rev.B x 1

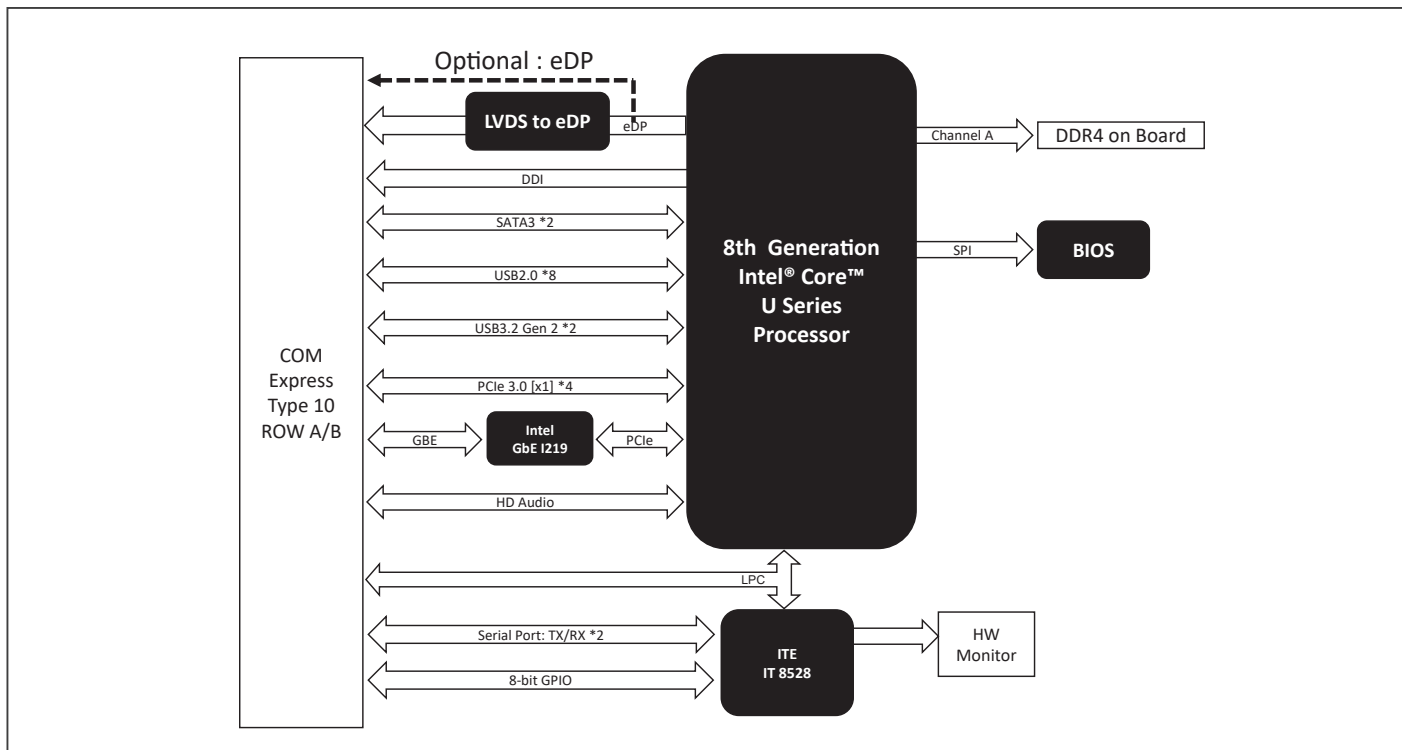
Optional Accessories

- ECB-920A-A11-0001
COMe Type 6/10.Carrier Board.ATX.2.5GbE.8USB.2COM.4SATA.PCIe.AT/ATX.Rev. A1.1
- NanoCOM-WHU-HSP01
Heat Spreader, 84 x 55 x 11 mm, Black, NanoCOM-WHU
- NanoCOM-WHU-FAN01
CPU Cooler, 84 x 55 x 18 mm, Black, NanoCOM-WHU
- NanoCOM-FAN02
CPU cooler, 84 x 53 x 22.2mm.Silver.use w/HSP

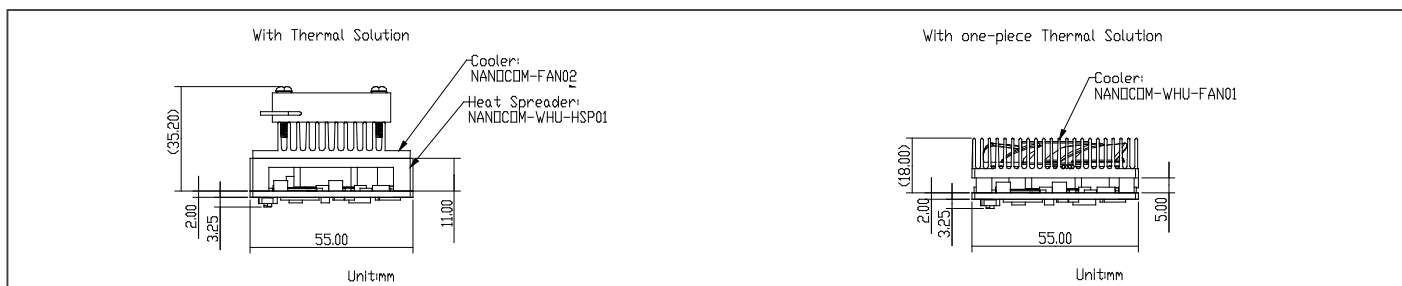
CPU Support Chart

CPU	Core/Thread	Base Frequency/ Turbo	TDP	Graphic
i7-8655UE	4C/8T	1.70GHz / 4.40GHz	15W	Intel® UHD Graphics 620
i5-8365UE	4C/8T	1.60GHz / 4.10GHz	15W	Intel® UHD Graphics 620
i3-8145UE	2C/4T	2.20GHz / 3.90GHz	15W	Intel® UHD Graphics 620
Celeron 4305UE	2C/2T	2.00GHz	15W	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	OTHERS
NANOCOM-WHU-B10-0001	Type 10 (COM.0 Rev. 3.0)	i7-8665UE	Onboard DDR4 8GB	LVDS, DDI x 1	18/24bits 1CH LVDS	SATA3 x 2	GbE x 1	USB 3.2 Gen 2 x 2 USB 2.0 x 8	2 (Tx/Rx)	PCle (x1) x 4	12V	0°C - 60°C	LPC, SMBus, I2C