

Features

- Onboard LPDDR5(X), up to 32GB
- Onboard NVMe, up to 256GB
- eDP x 1, DDI x 1
- USB 2.0 x 8, USB 3.2 Gen 2 x 2
- PCIe 4.0 [x1] x 4
- Intel® Ethernet Controller I226-V/IT 2.5GbE x 1
- COM Express Type 10, 3.31" x 2.17" (84mm x 55mm)



Specifications

System	
Form Factor	COM Express Mini Size, Type 10
CPU	Intel® Core™ Ultra Processors: Intel® Core™ Ultra 7 Processor 155H (16C/22T, up to 4.8 GHz, 28W) Intel® Core™ Ultra 5 Processor 125H (14C/18T, up to 4.5 GHz, 28W)
Chipset	Integrated with Intel® SoC
Memory	onboard LPDDR5(X) 6400MHz, up to 32GB
Onboard Storage	NVMe, up to 256GB
BIOS	AMI UEFI
Wake on LAN	Yes
Watchdog Timer	255 Levels
Dimension	3.31" x 2.17" (84mm x 55mm)
Security	fTPM / dTPM (Default)
Power	
Power Requirement	+9V-19V and +5VSB for ATX, +9-19V for AT
Power Type	AT/ATX, switch by BIOS
Power Consumption (Typical)	Intel® Core™ Ultra 7 Processor 155H, 2.06A@+19V
Display	
Graphics Controller	Intel® Arc™ Graphics
Video Output	Dual Display: DDI x 1, up to 3840 x 2160 eDP x 1, up to 3840 x 2160 @60Hz
I/O	
Ethernet	Intel® Ethernet Controller I226, 2.5GbE x 1
Audio	High Definition Audio Interface
USB Port	USB 2.0 x 8, USB 3.2 Gen 2 x 2
Serial Port	2-Wire UART x 2 (Tx/Rx)
HDD Interface	SATA 6Gb/s x 2
Expansion	PCIe 4.0 [x1] x 4 MIPI CSI x 2 LPC x 1

GPIO	8-bit
SMBus/I2C	I2C x 1, from EC (default) or CPU, switch by BIOS SMBus x 1, from CPU
Environment	
Operating Temperature	-4°F ~ 158°F (-20°C ~ 70°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® 11 (64-bit) Linux Ubuntu 24.04.1/Kernel 6.8
Weight	0.15 lb. (0.07Kg)

Packing List

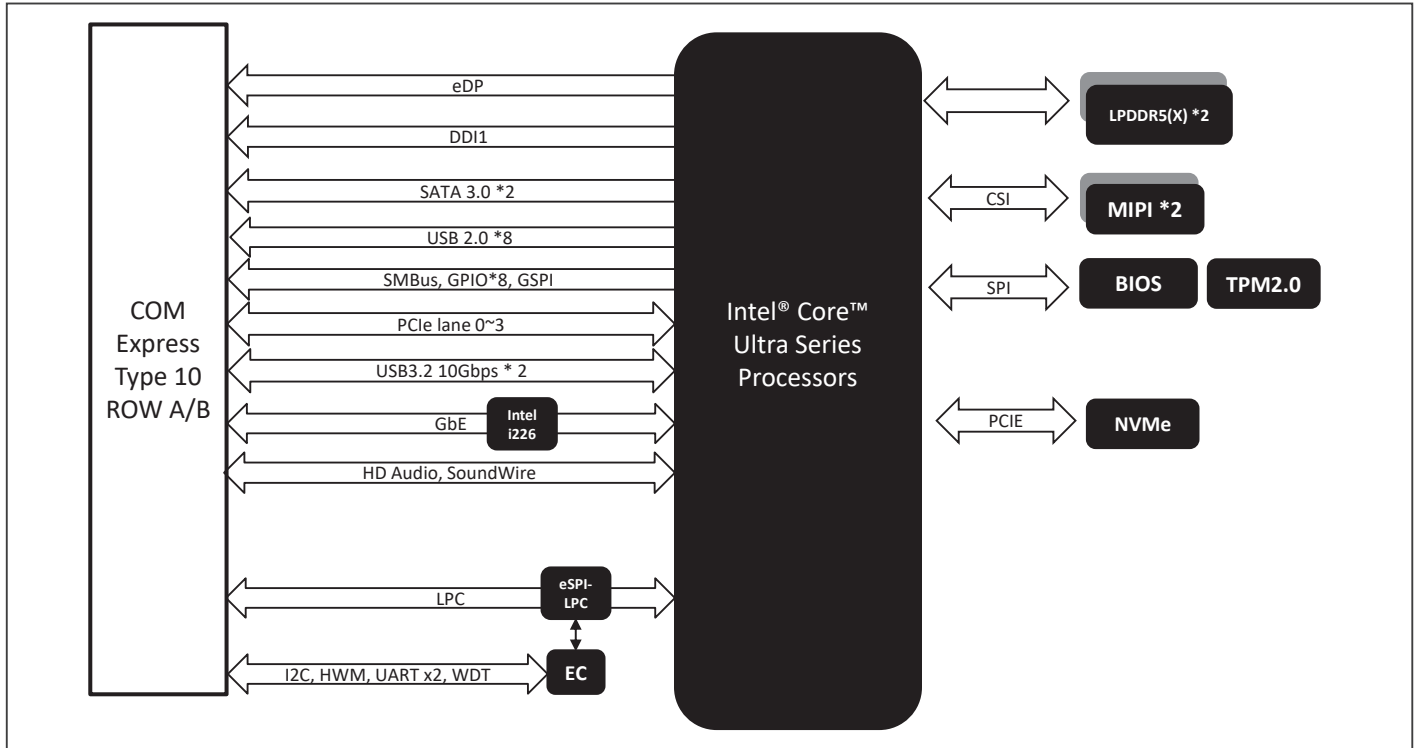
- NanoCOM-MTU

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
NANOCOM-MTU-FAN01	Cooler.84 x 55 x 43.40mm.4pin
NANOCOM-MTU-HSP01	Heat Spreader.84 x 55 x 11mm.Black

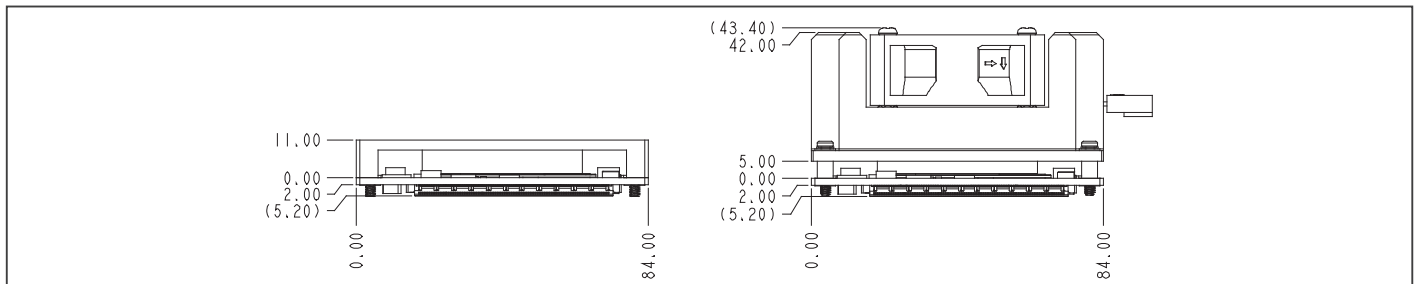


Block Diagram



Dimension

Unit: mm



Ordering Information

Part Number	COM Express Type	CPU	Memory	ECC support	Display	Storage	LAN	USB	UART	Expansion	Power	Temperature	Others
NANOCOM-MTU-A10-0001	Type 10	Intel® Core™ Ultra 7 155H	16GB LPDDR5X	—	eDP x 1, DDI x 1	SATA III x 2 128GB NVMe	Intel® Ethernet Controller I226-IT x 1	USB 3.2 Gen 2 x 2, USB 2.0 x 8	2-Wire UART x 2 (Tx/Rx)	PCIe 4.0 [x1] x 4	9V~19V	-20°C ~ 70°C	LPC, GPIO 8-bit, I2C(EC), SMBus, MIPI CSI x 2
NANOCOM-MTU-A10-0002	Type 10	Intel® Core™ Ultra 5 125H	16GB LPDDR5X	—	eDP x 1, DDI x 1	SATA III x 2 128GB NVMe	Intel® Ethernet Controller I226-IT x 1	USB 3.2 Gen 2 x 2, USB 2.0 x 8	2-Wire UART x 2 (Tx/Rx)	PCIe 4.0 [x1] x 4	9V~19V	-20°C ~ 70°C	LPC, GPIO 8-bit, I2C(EC), SMBus, MIPI CSI x 2