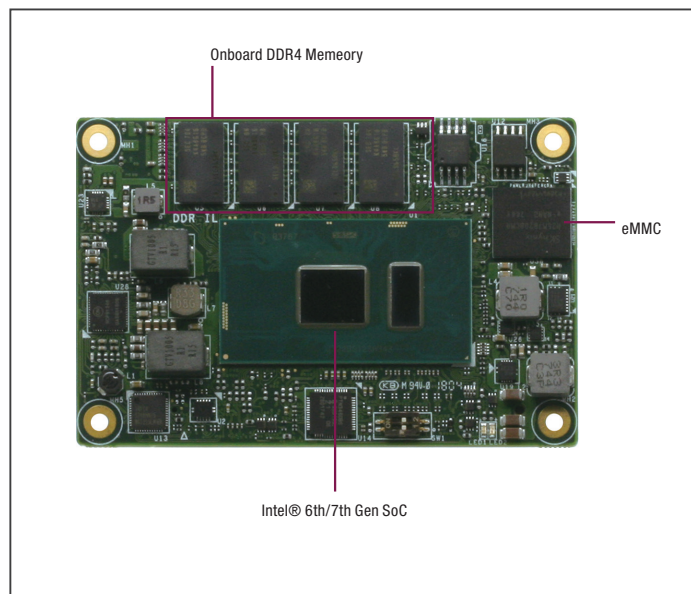


COM Express Type 10 with 7th Generation Intel® Core™ ULT Series Processor



Features

- 7th Generation Intel® Core™ ULT Series Processor
- Onboard 8GB DDR4 2666 Memory
- Onboard 64 GB eMMC Support
- Gigabit Ethernet x 1
- 18/24-bit Single-Channel LVDS LCDs/eDP, DDI x 1
- High Definition Audio Interface
- SATA x 2
- USB 3.0 x 2, USB 2.0 x 8
- PCI-Express [x1] x 4
- GPIO x 8, SMBus, I2C, LPC
- COM Express Type 10
- Mini Size, 84mm x 55mm
- Supports Industrial Grade Temperature

Specifications

System	
Form Factor	COM Express Mini size, Type 10
CPU	7th generation Intel® Core™ ULT Series Processor
CPU Frequency	Up to i7-7600U, 2c/4t, 2.8GHz
Chipset	Intel® Core™/Celeron® Processor SoC
Memory Type	Non-EEC DDR4-2133
Max. Memory Capacity	8GB DDR4 onboard
BIOS	AMI BIOS, Legacy free
Wake on LAN	Yes
Watchdog Timer	255 Levels
Power Requirement	Normal: +12V
Power Supply Type	AT/ATX
Power Consumption (Typical)	i7-7600U+8GB 12V@1.83A, i3-7100U 12V@1.42A. Under 100% loading. CPU Set to 15W TDP. CPU base frequency may change accordingly.
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 ~ 80 °C) Option for NANOCOM-SKU series
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	80,000
Certification	CE/FCC Class A
Display	
Display Controller	Onboard 7th Gen. intel® Core™ U-Series Processor, GT2-520/510
Video Output	LVDS LCD/eDP, DDI x 1
LVDS Interface	Supports 18bit and 24bit Single channel
I/O	
Ethernet	Intel® I219 GbE
Audio	High Definition Audio Interface
USB Support	USB 2.0 x 8, USB 3.0 x 2
Serial Port	TX/RX x 2
HDD Interface	SATA 2 x 2
Onboard Storage	eMMC optional
Expansion Slot	PCIe [x1] supports 3 devices. Up to four PCIe lanes available. LPC Bus Smbus I2C
GPIO	8-bit
TPM	fTPM Supported



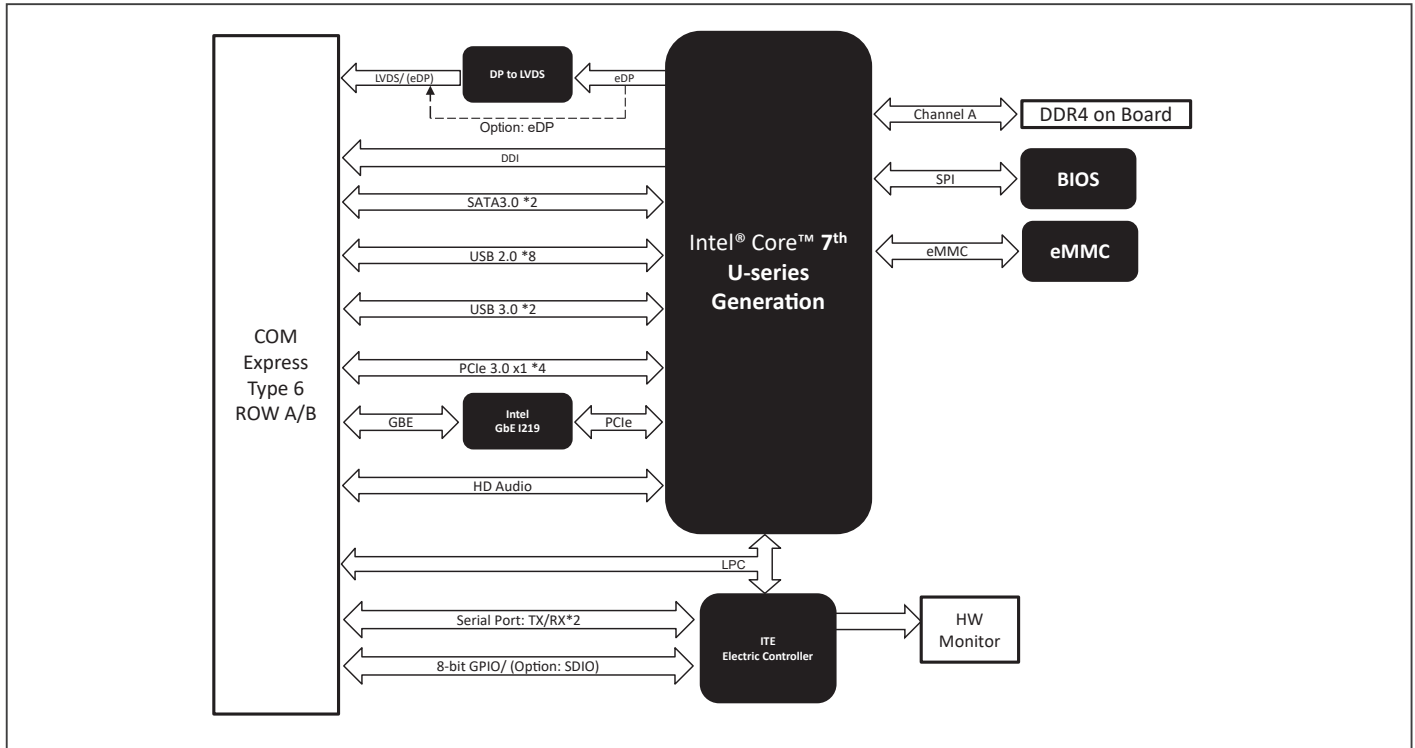
Packing List

- Screws
- NanoCOM-KBU-A20

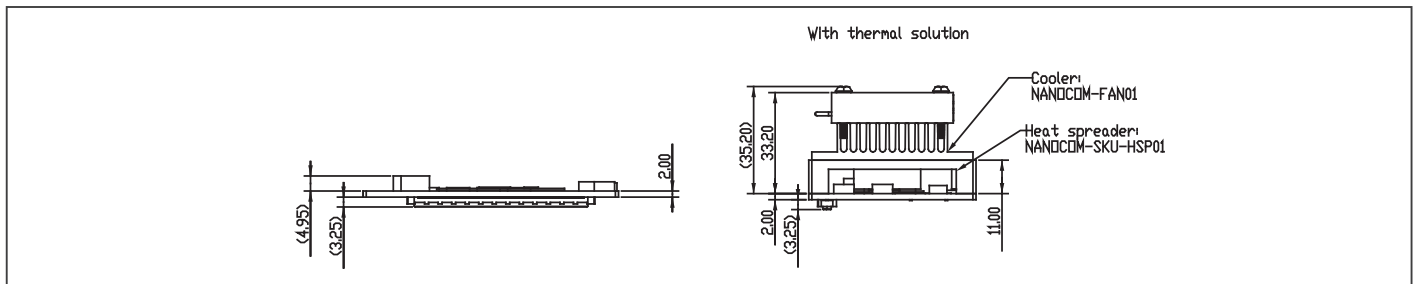
Optional Accessories

- **ECB-920A-A10-0001**
COM Type 1/6/10 Carrier Board, ATX, GbE, 8 USB, 2 COM, 4 SATA, PCIe, AT/ATX, Legacy Free, Rev. A1.0
- **NanoCOM-SKU-HSP01**
Heat Spreader, 84 x 55 x 11 mm, Black, NanoCOM-SKU
- **NanoCOM-FAN01**
CPU Cooler, 84 x 55 x 22.2 mm, Silver use w/ HSP

Block Diagram Unit: mm



Dimension Unit: mm



Ordering Information

Standard Part Number	COM Express Type	CPU	Memory	Display	LVDS	Storage	LAN	USB	UART	Expansion Slot	Power	Temp	Others
NanoCOM-KBU-A20-0001	10 (COM.0 Rev 3.0)	7th Gen. Intel® Core™ i7-7600U 2c/2.8 GHz	8GB DDR4	LVDS/(eDP), DDI x1	18/24b 1CH (LVDS share with eDP)	SATA x 2	GbE x1	USB 3.0 x 2 USB 2.0 x 8	2 (Tx/Rx)	PCI-E(x1) x4	12V	0°C~60°C	I2C, GPIO, SMBus, 64GB eMMC

CPU Supports Chart

CPU Kabylake	Base Frequency/Turbo Boost GHz	Core/Thread	Graphic
i7-7600U	2.8/3.9	2/4	GT2 - 520
i5-7300U	2.6/3.5	2/4	GT2 - 520
i3-7100U	2.4	2/4	GT2 - 520
C-3965U	2.2	2/2	GT1 - 510

* 6xxxU SoC supported as option