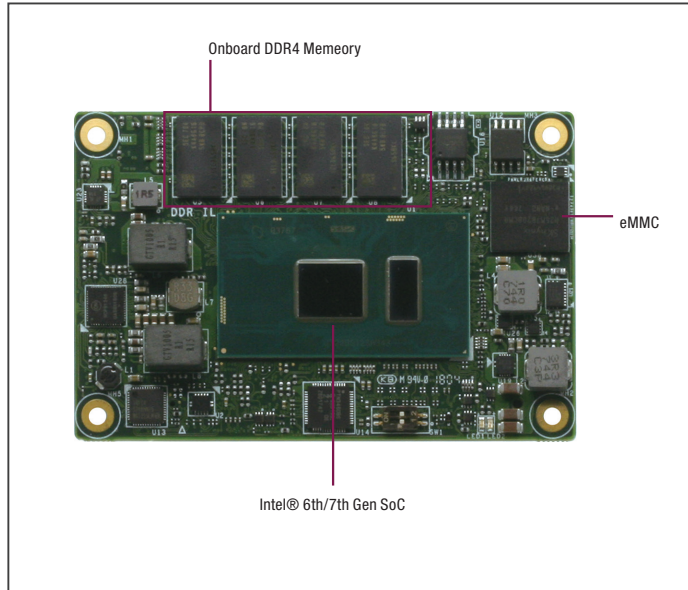


# NanoCOM-KBU

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



## Features

- 7th Generation Intel® Core™ U/Celeron™ Series Processor (formerly Kaby Lake)
- Onboard Memory DDR4 2133, up to 4GB
- Intel i219LM Gigabit Ethernet x 1
- 18/24-bit Single-Channel LVDS LCDs/eDP, DDI x 1
- High Definition Audio Interface
- SATA3 x 2
- USB 2.0 x 8, USB3.2 Gen 1 x 2
- PCIe [x1] x 4
- COM Express Mini Size, Type 10, COM.0 R2.1



## Specifications

System	
Form Factor	COM Express Mini size, Type 10
CPU	7th Generation Intel® Core™/Celeron™ U Series Processor
CPU Frequency	Up to i7-7600U, 2.60GHz
Chipset	7th Generation Intel® Core™/Celeron™ U Series SoC
Memory Type	Onboard DDR4
Max. Memory Capacity	4GB
BIOS	AMI UEFI
Wake on LAN	Yes
Watchdog Timer	255 Levels
Power Requirement	+12 V and +5 VSB for ATX, +12V for AT
Power Supply Type	AT/ATX
Power Consumption (Typical)	1.83A@12V, full load, i7-7600U
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) Option
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
Certification	CE/FCC Class A
Display	
Graphic Controller	Intel® HD Graphics 620/610/520/510
Video Output	Dual Display : LVDS LCD/eDP, DDI x 1 Single Channel LVDS (18/24 bit)
I/O	
Ethernet	Intel® i219 GbE x 1
Audio	High Definition Audio Interface
USB Port	USB 2.0 x 8, USB 3.2 Gen 1 x 2
Serial Port	2-Wire UART (Tx/Rx) x 2
HDD Interface	SATA 3 x 2
Expansion Slot	PCIe[x1] x 4 LPC SMBus I2C
GPIO	8-bit
Onboard Storage	—
TPM	1TPM

## Packing List

- NanoCOM-KBU x 1

## Optional Accessories

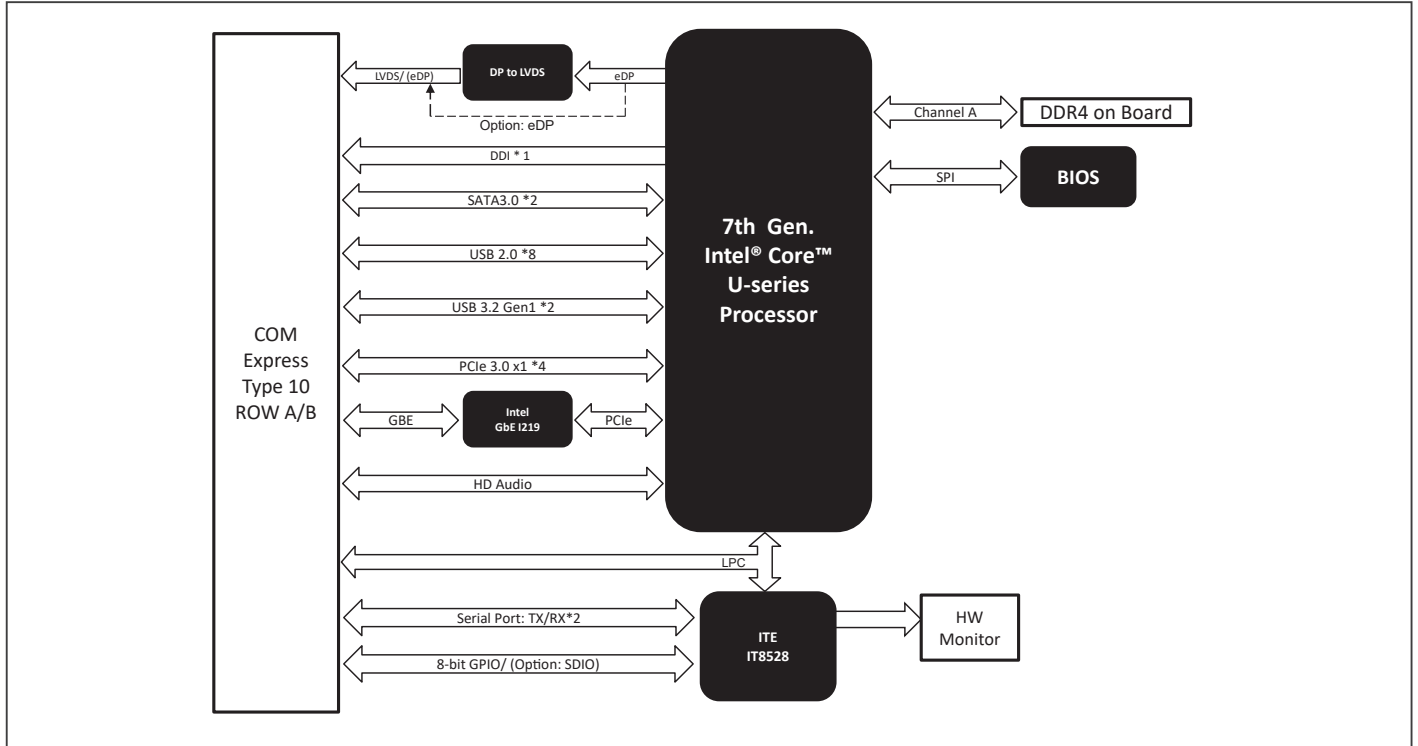
- **ECB-920A-A11-0001**  
COMe Type 6/10.Carrier Board.ATX.2.5GbE.8USB.2COM.4SATA.PCIe.AT/ATX.Rev.A1.1
- **NanoCOM-SKU-HSP01**  
Heat Spreader, 84 x 55 x 11 mm, Black, NanoCOM-SKU
- **NANOCOM-KBU-FAN01**  
CPU cooler.84\*55\*18 mm.Black

## CPU Support Chart

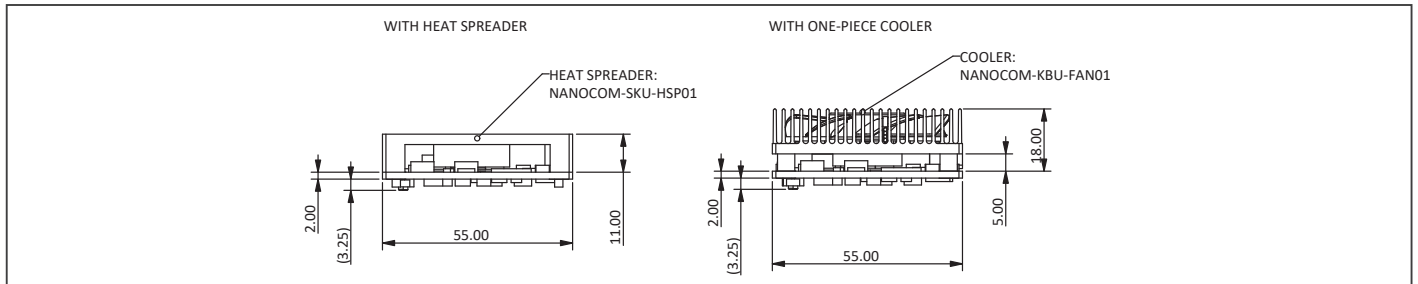
CPU	Core/Thread	Base Frequency/Turbo	TDP	Graphic
i7-7600U	2C/4T	2.80GHz / 3.90GHz	15W	Intel® HD Graphics 620
i5-7300U	2C/4T	2.60GHz / 3.50GHz	15W	Intel® HD Graphics 620
i3-7100U	2C/4T	2.40GHz	15W	Intel® HD Graphics 620
Celeron 3965U	2C/2T	2.20GHz	15W	Intel® HD Graphics 610

\* 6xxU SoC supported as option

## 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-KBU-A10-0001	Type 10 (COM.0 Rev. 2.1)	i7-7600U	Onboard DDR4 4GB	LVDS, DDI x 1	18/24bits 1CH LVDS	SATA3 x 2	GbE x 1	USB 3.2 Gen 1 x 2 USB 2.0 x 8	2 (Tx/Rx)	PCIe [x1] x 4	12V	0°C - 60°C	LPC, SMBus, I2C
NANOCOM-KBU-A10-0002	Type 10 (COM.0 Rev. 2.1)	i5-7300U	Onboard DDR4 4GB	LVDS, DDI x 1	18/24bits 1CH LVDS	SATA3 x 2	GbE x 1	USB 3.2 Gen 1 x 2 USB 2.0 x 8	2 (Tx/Rx)	PCIe [x1] x 4	12V	0°C - 60°C	LPC, SMBus, I2C