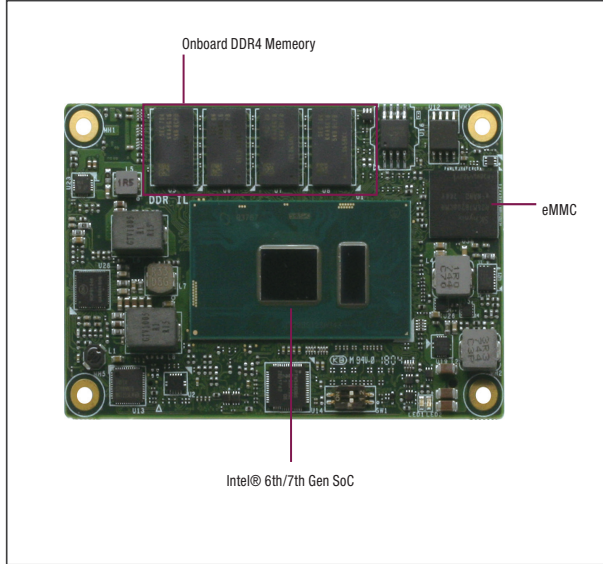


# NanoCOM-KBU-A20

COM Express Type 10 with 7th Gen Intel® Core™ Processors

COM Express CPU Modules



## Features

- Onboard LPDDR4, up to 8GB
- Onboard eMMC, up to 64GB
- LVDS x 1, DDI x 1
- USB 2.0 x 8, USB 3.2 Gen 1 x 2
- PCIe 3.0 [x1] x 4
- Intel® I219-LM GbE 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	7th Generation Intel® Core™ Processors: Intel® Core™ i7-7600U (2C/4T, 2.80 GHz, 15W) Intel® Core™ i5-7300U (2C/4T, 2.60 GHz, 15W) Intel® Core™ i3-7100U (2C/4T, 2.40 GHz, 15W)
Chipset	Integrated with Intel® SoC
Memory	Onboard LPDDR4 2133MHz, up to 4GB
Onboard Storage	eMMC, up to 64GB (Optional)
BIOS	AMI UEFI
Wake on LAN	Yes
Watchdog Timer	255 Levels
Dimension	3.31" x 2.17" (84mm x 55mm)
Security	fTPM
Power	
Power Requirement	+12V and +5VSB for ATX, +12V for AT
Power Type	AT/ATX
Power Consumption (Typical)	Intel® Core™ i7-7600U, 1.83A @+12V
Display	
Graphics Controller	Intel® HD Graphics 620
Video Output	Dual Display: DDI x 1, up to 3840 x 2160 18/24-bit Single-Channel LVDS/eDP x 1, up to 1366 x 768
I/O	
Ethernet	Intel® I219-LM 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 x 2 (Tx/Rx)
HDD Interface	SATA III x 2
Expansion	PCIe 3.0 [x1] x 4 LPC x 1
GPIO	8-bit
SMBus/I2C	I2C x 1, SMBus x 1

Environment	
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C) Optional: -40°F ~ 185°F (-40°C ~ 85°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® 10 (64-bit) Linux Ubuntu 16.04.4/Kernel 4.13.0
Weight	0.15 lb. (0.07Kg)

## Packing List

- NANOCOM-KBU-A20

## Optional Accessories

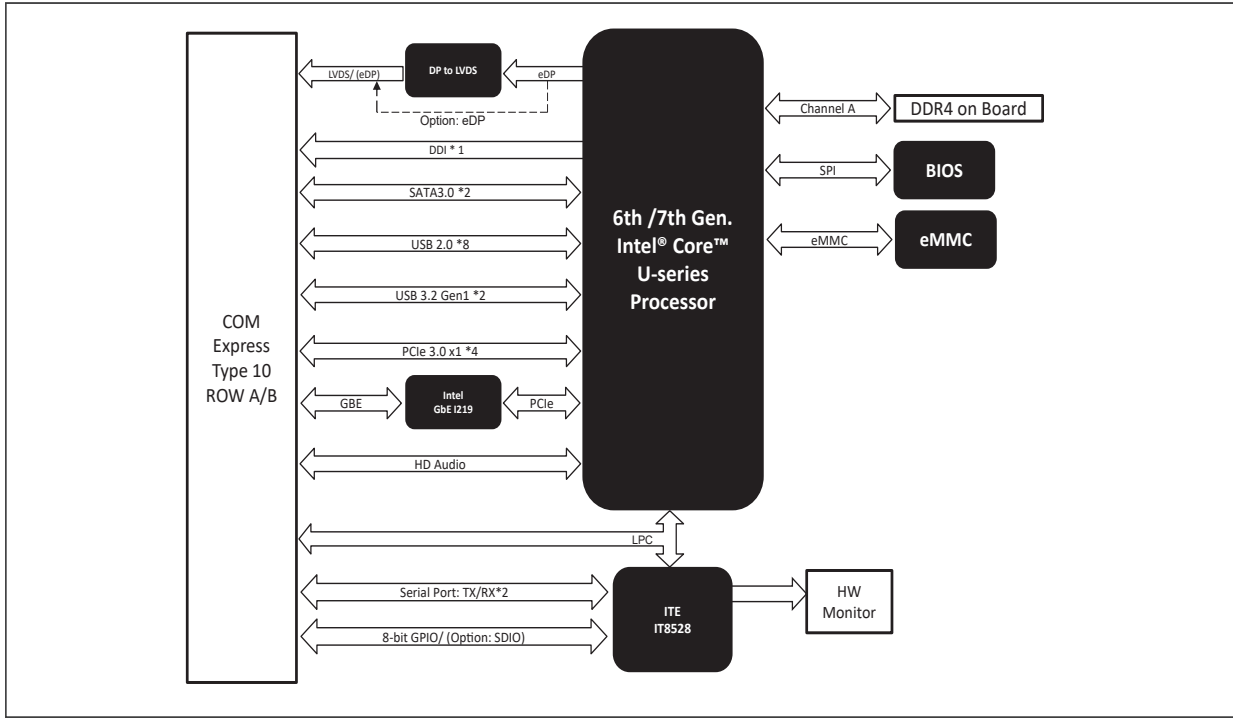
Part Number	Description
ECB-920A-A11-0001	COMe Type 6/10 Carrier Board. ATX. 2.5GbE. 8USB. 2COM. 4SATA. PCIe. AT/ATX. Rev. A1.1
NanoCOM-SKU-HSP01	Heat Spreader. 84 x 55 x 11 mm. Black
NANOCOM-KBU-FAN01	Cooler. 84 x 55 x 18 mm.

# NanoCOM-KBU-A20

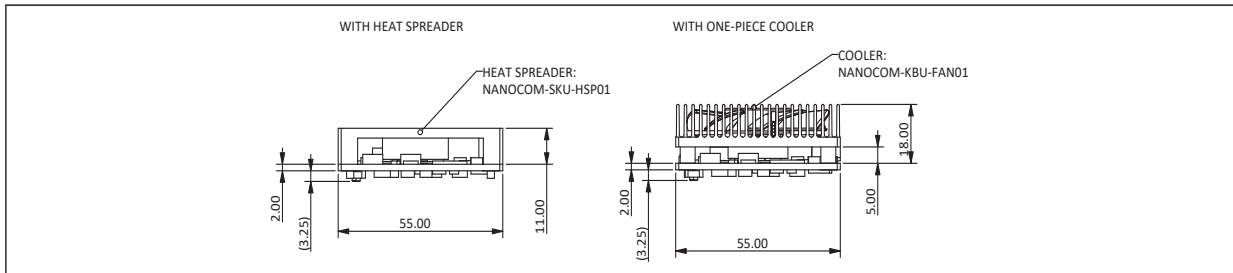
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COM Express CPU Modules

## Block Diagram Unit: mm



## Dimension Unit: mm



## Ordering Information

Part Number	COM Express Type	CPU	Memory	ECC support	Display	Storage	LAN	USB	UART	Expansion	Power	Temperature	Others
NANOCOM-KBU-A20-0001	Type 10	Intel® Core™ i7-7600U	8GB Onboard DDR4	—	LVDS x 1, DDI x 1	SATA III x 2 64GB eMMC	Intel® I219-LM x 1	USB 3.2 Gen 1 x 2 USB 2.0 x 8	2-Wire UART x 2 (Tx/Rx)	PCIe 3.0 [x1] x 4	12V	0°C ~ 60°C	LPC, GPIO 8-bit, I2C, SMBus

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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