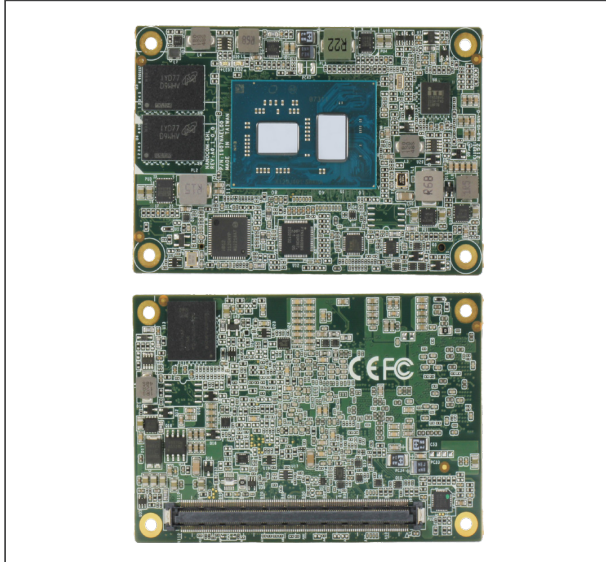


# NanoCOM-EHL

COM Express Type 10 with Intel Atom® X/Pentium® Processor J/Celeron® Processor J & N Series Processors

COM Express CPU Modules



## Features

- Onboard LPDDR4, up to 16GB
- SATA III x 2, Onboard eMMC, up to 64GB (Optional)
- LVDS/eDP x 1, DDI x 1
- USB 2.0 x 8, USB 3.2 Gen 2 x 2
- PCIe Gen3 [x1] x4
- Intel® I226 2.5GbE x 1
- COM Express Type 10, 3.31" x 2.17" (84mm x 55mm)
- Supports Wide Temperature -40°F ~ 185°F (-40°C ~ 85°C)



## Specifications

System	
Form Factor	COM Express Mini Size, Type 10
CPU	Intel Atom® Processor X Series: Intel Atom® x6413E (4C/4T, 1.50 GHz, 9W) Intel Atom® x6425E (4C/4T, 2.20 GHz, 12W) Intel Atom® x6425RE (4C/4T, 1.90 GHz, 12W)  Intel® Celeron® Processor J & N Series: Intel® Celeron® Processor J6412 (4C/4T, 2.00 GHz, 10W) Intel® Celeron® Processor N6211 (2C/2T, 1.20 GHz, 6.5W)  Intel® Pentium® Processor J Series: Intel® Pentium® Processor J6426 (4C/4T, 2.00 GHz, 10W)
Chipset	Integrated with Intel® SoC
Memory	Onboard LPDDR4 3733MHz, up to 16GB
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 Atom® x6425E, 1.44A @+12V
Display	
Graphics Controller	Intel® UHD Graphics for 10th Gen Intel® Processors
Video Output	Dual Display: DDI x 1, up to 3840 x 2160 18/24-bit Single-Channel LVDS x 1, up to 1920 x 1080 or eDP x 1, up to 3840 x 2160
I/O	
Ethernet	Intel® I226-IT 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 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) WITAS 2: -40°F ~ 185°F (-40°C ~ 85°C) on selected CPU SKU
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 20.04.3/Kernel 5.13.0
Weight	0.15 lb. (0.07Kg)

## Packing List

- NANOCOM-EHL

## Optional Accessories

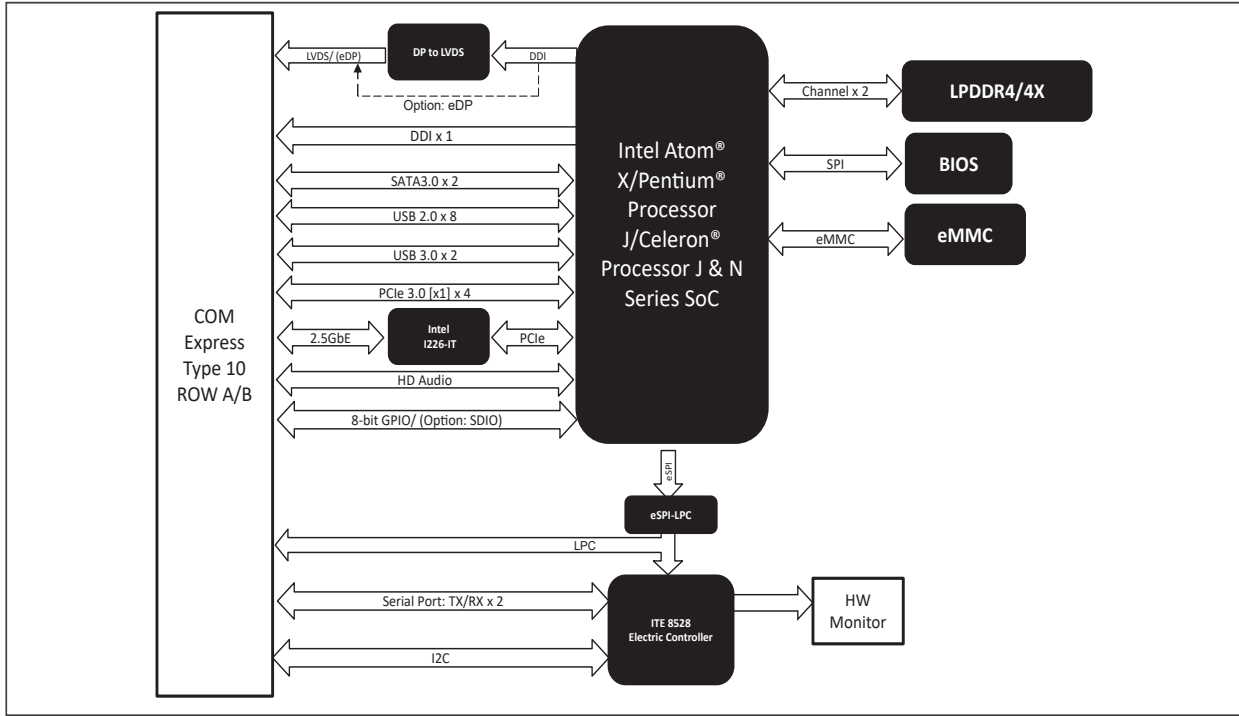
Part Number	Description
ECB-920A-A11-0001	COMe Type 6/10 Carrier Board. ATX. 2.5GbE. 8USB. 2COM. 4SATA. PCIe. AT/ATX. Rev. A1.1
NanoCOM-EHL-FAN01	Cooler. 84 x 55 x 18mm. 4pin. NanoCOM-EHL for x6000E series
NanoCOM-EHL-FAN02	Cooler. 84 x 55 x 18mm. 4pin. NanoCOM-EHL for N, J series
NANOCOM-EHL-HSP01	Heat Spreader. 84*55*11mm. NanoCOM-EHL for X series
NANOCOM-EHL-HSP02	Heat Spreader. 84*55*11mm. NanoCOM-EHL N, J series

# NanoCOM-EHL

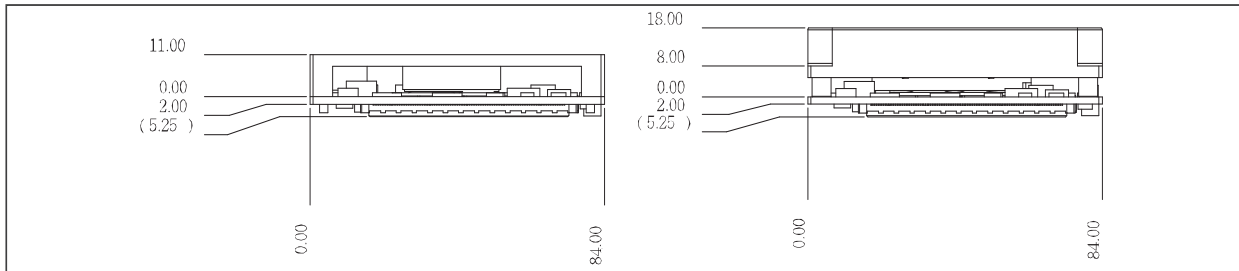
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COM Express CPU Modules

## 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-EHL-A11-0002	Type 10	Intel® Celeron® Processor J6412	8GB Onboard DDR4	—	LVDS x 1, DDI x 1	SATA III x 2, 32GB eMMC	Intel® I226-IT x 1	USB 3.2 Gen 2 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
NANOCOM-EHL-A11-0003	Type 10	Intel® Pentium® Processor J6426	16GB Onboard DDR4	—	LVDS x 1, DDI x 1	SATA III x 2, 64GB eMMC	Intel® I226-IT x 1	USB 3.2 Gen 2 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
NANOCOM-EHL-A11-0005	Type 10	Intel Atom® x6413E	8GB Onboard DDR4	—	LVDS x 1, DDI x 1	SATA III x 2, 64GB eMMC	Intel® I226-IT x 1	USB 3.2 Gen 2 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
NANOCOM-EHL-A11-0006	Type 10	Intel Atom® x6425E	8GB Onboard DDR4	—	LVDS x 1, DDI x 1	SATA III x 2, 64GB eMMC	Intel® I226-IT x 1	USB 3.2 Gen 2 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
NANOCOM-EHLW2-A11-0006	Type 10	Intel Atom® x6425E	8GB Onboard DDR4	—	LVDS x 1, DDI x 1	SATA III x 2, 64GB eMMC	Intel® I226-IT x 1	USB 3.2 Gen 2 x 2 USB 2.0 x 8	2-Wire UART x 2 (Tx/Rx)	PCIe 3.0 [x1] x 4	12V	-40°C ~ 85°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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