

COM Express Type 10 Module with Intel<sup>®</sup> Atom<sup>™</sup> SoC

## Specifications

System	
Form Factor	COM Express Mini size, Type 10
CPU	Onboard Intel <sup>®</sup> Atom <sup>™</sup> /Celeron <sup>®</sup> /Pentium <sup>®</sup> SoC
CPU Frequency	E39xx series, N4xxx series
Chipset	Intel <sup>®</sup> Atom <sup>™</sup> /Celeron <sup>®</sup> Processor SoC
Memory Type	Onboard LPDDR4
Max. Memory Capacity	8GB LPDDR4 Onboard
BIOS	AMI BIOS, Legacy free
Wake on LAN	Yes
Watchdog Timer	255 Levels
Power Requirement	Standard : +12V, AT/ATX (Optional: +5V, AT/ATX)
Power Supply Type	AT/ATX
Power Consumption (Typical)	Up to use E3950 TDP 12W CPU
Dimension (L x W)	3.31" x 2.17" (84mm x 55mm)
Operating Temperature	32 °F ~ 140 °F (0 °C ~ 60 °C)
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	Intel <sup>®</sup> HD Graphic Gen. 9
Video Output	LVDS LCD/eDP, DDI x 1
LVDS Interface	Supports 18bit and 24bit Single channel
I/O	
Ethernet	Intel <sup>®</sup> I210IT
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	Optional onboard eMMC
Expansion Slot	PCI Express [x1], max. 3 device LPC Bus Smbus I2C
GPIO	GPIO 8-bit
TPM	—

## Features

- Intel<sup>®</sup> Atom<sup>™</sup> E3900 Processor SoC
- Onboard Memory LPDDR4 4GB
- Supports eDP/LVDS, DDI Display
- SATA x 2, eMMC 5.0 (Optional, up to 64 GB)
- USB 2.0 x 8 + USB 3.0 x 2
- PCI-Express [x1] x 3 or PCIe [x4] x 1
- PICMG COM.0 R3.0. Type 10. 84mm x 55mm



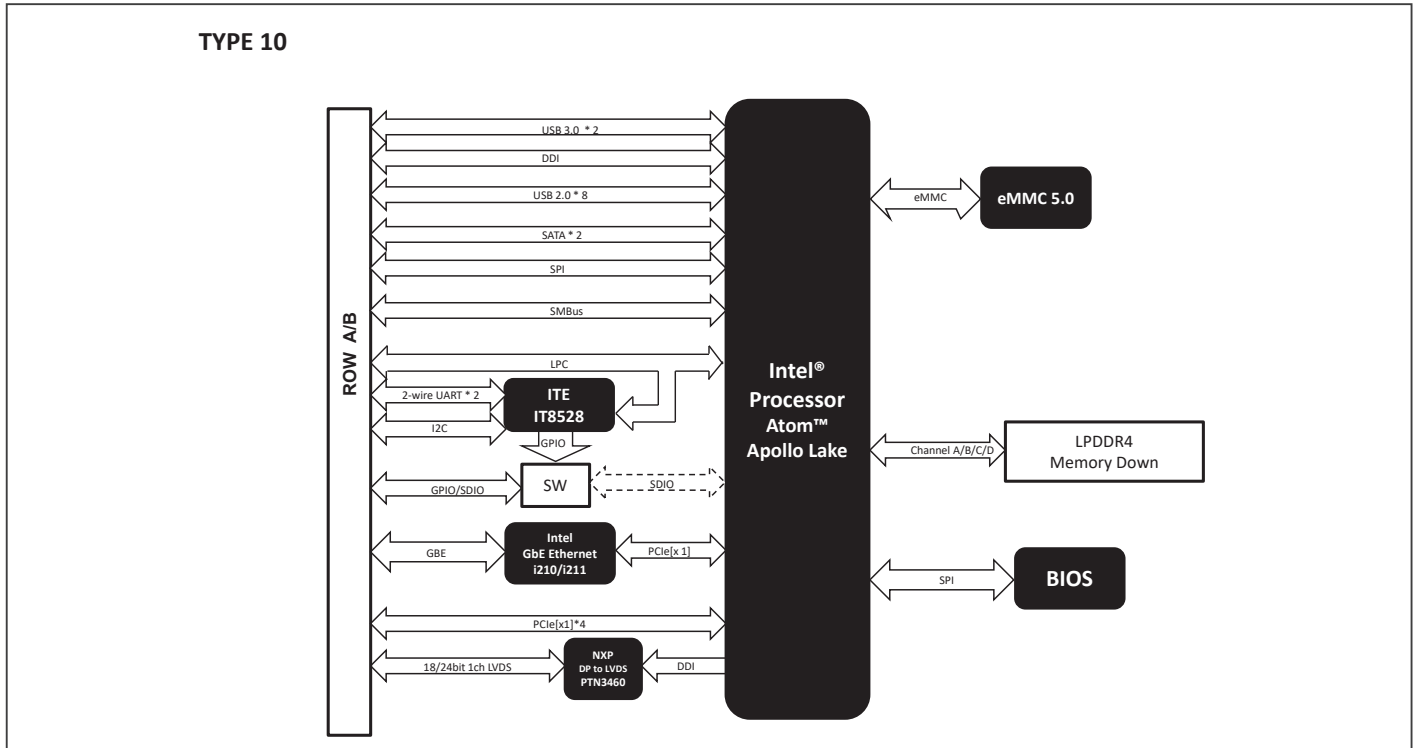
## Packing List

- Screws
- Product DVD
- NanoCOM-APL

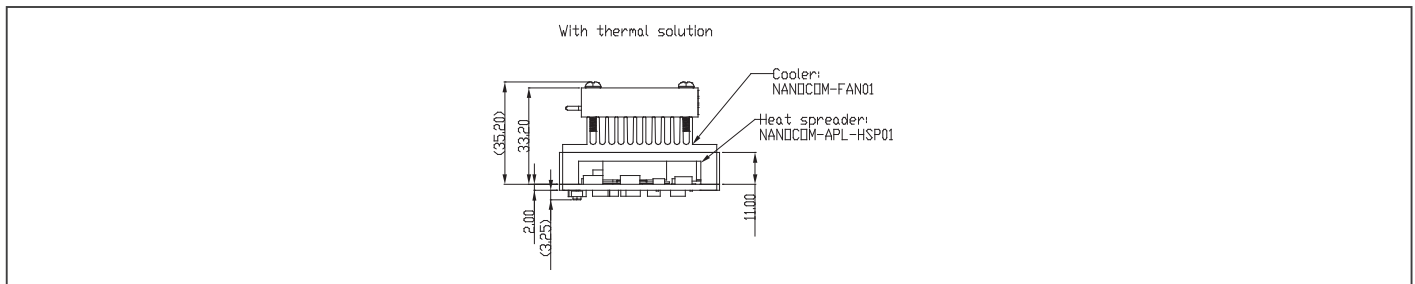
## Optional Accessories

- **NanoCOM-APL-E-HSP01**  
Heat Spreader 84 x 55 x 11 mm, Black, NanoCOM-APL For E39xx CPU only
- **NanoCOM-APL-N-HSP01**  
Heat Spreader 84 x 55 x 11 mm, Black, NanoCOM-APL For Nxxx CPU only
- **NanoCOM-FAN01**  
CPU Cooler, for NanoCOM, to be used with Heat Spreader
- **ECB-920A-A10-0001**  
COM Type 1/6/10, Carrier Board, ATX, GbE, 8USB, 2COM, 4SATA, PCIe, AT/ATX, Legacy Free, Rev. A1.0

## 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-APL-A10-0001	10 (COM.0 Rev 3.0)	Intel® Pentium® N4200	4GB DDR4	LVDS, DDI x 1	18/24-bit 1-channel (Optional: eDP)	SATA x 2	GbE x 1	USB 3.0 x 2 USB 2.0 x 8	2 (Tx/Rx)	PCI-E[x1] x3	12V	0°C~60°C	I2C, SMBus, 8b-GPIO/(SDIO)
NANOCOM-APL-A10-0002	10 (COM.0 Rev 3.0)	Intel® Celeron® N3350	2GB DDR4	LVDS, DDI x 1	18/24-bit 1-channel (Optional: eDP)	SATA x 2	GbE x 1	USB 3.0 x 2 USB 2.0 x 8	2 (Tx/Rx)	PCI-E[x1] x3	12V	0°C~60°C	I2C, SMBus, 8b-GPIO/(SDIO)
NANOCOM-APL-A10-0003	10 (COM.0 Rev 3.0)	Intel® Atom® E3950	4GB DDR4	LVDS, DDI x 1	18/24-bit 1-channel (Optional: eDP)	SATA x 2	GbE x 1	USB 3.0 x 2 USB 2.0 x 8	2 (Tx/Rx)	PCI-E[x1] x3	12V	0°C~60°C	I2C, SMBus, 8b-GPIO/(SDIO)