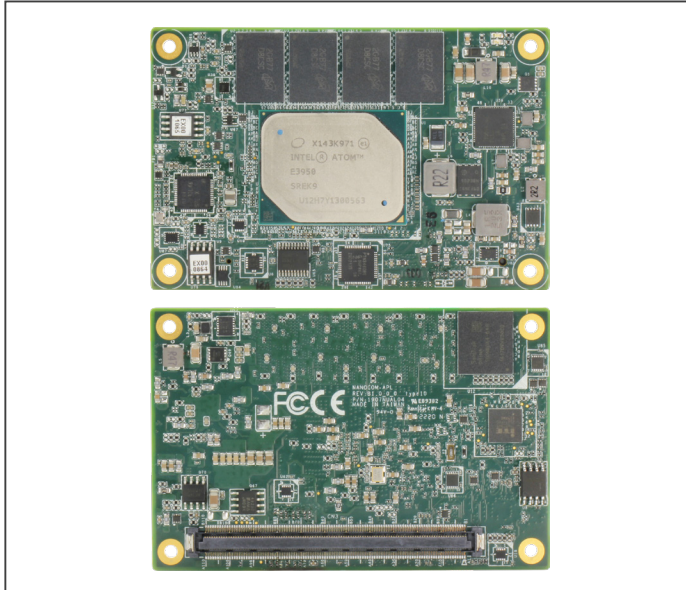


NanoCOM-APL-B10

COM Express Type 10 CPU Module with Onboard Intel® Atom™/Celeron®/Pentium® Processor



Features

- Intel® Atom™/Celeron®/Pentium® Processor
- Onboard Memory LPDDR4 up to 8GB
- Intel i226IT 2.5GbE x 1
- 18/24-bit Single Channel LVDS/eDP, DDI x 1
- SATA3 x 2, Onboard eMMC up to 64GB (Optional)
- USB 2.0 x 8, USB 3.2 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	Intel® Atom™/Celeron®/Pentium® Processor
CPU Frequency	Up to N4200, 2.00GHz
Chipset	Intel® Atom™/Celeron®/Pentium® SoC
Memory Type	Onboard LPDDR4
Max. Memory Capacity	8GB
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)	0.6A@12V, full load, N4200
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 ~ 185°F (-40°C ~ 85°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
Certification	CE/FCC Class A
Display	
Graphic Controller	Intel® HD Graphic 505/500
Video Output	Dual Display : LVDS LCD/eDP, DDI x 1 Single Channel LVDS (18/24 bit)
I/O	
Ethernet	Intel® i226IT 2.5GbE 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	SATA3 x 2
Expansion Slot	PCIe [x1] x 4 (up to 3 devices) LPC SMBus I2C
GPIO	8-bit from PCH
Onboard Storage	eMMC up to 64GB (Optional)
TPM	ITPM

Packing List

- NanoCOM-APL-B10

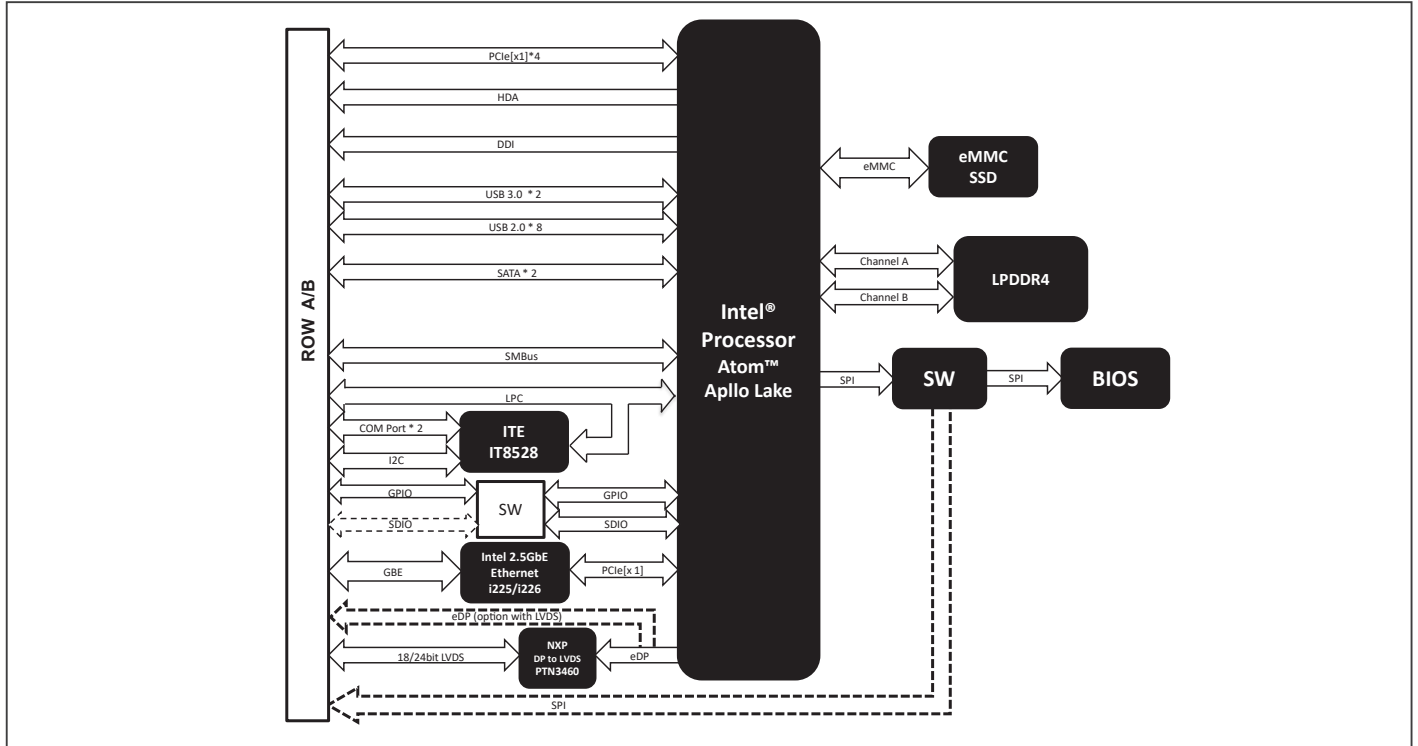
Optional Accessories

- **ECB-920A-A11-0001**
COMe Type 6/10.Carrier Board.ATX.2.5GbE.8USB.2COM.4SATA.PCIe.AT/ATX.Rev. A1.1
- **NanoCOM-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-APL-E-FAN01**
CPU Cooler.12V.4P.84 x 55 x 18mm.Black

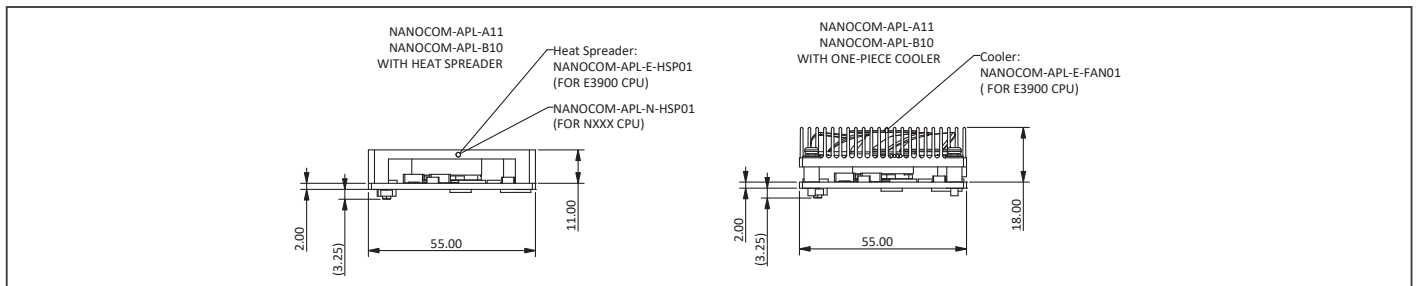
CPU Support Chart

CPU	Core/Thread	Base Frequency/Turbo	TDP	Graphic
N4200	4C/4T	1.10GHz / 2.50GHz	6W	Intel® HD Graphics 505
N3350	2C/2T	1.10GHz / 2.40GHz	6W	Intel® HD Graphics 500
E3950	4C/4T	1.60GHz / 2.00GHz	12W	Intel® HD Graphics 505
E3940	4C/4T	1.60GHz / 1.80GHz	9.5W	Intel® HD Graphics 500
E3930	2C/2T	1.20GHz / 1.80GHz	6.5W	Intel® HD Graphics 500

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-APL-B10-0001	Type 10(COM.0 Rev 2.1)	N4200	Onboard LPDDR4 8GB	LVDS, DDI x 1	18/24bits 1CH LVDS	SATA3 x 2, 64GB eMMC	2.5GbE 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-APL-B10-0002	Type 10(COM.0 Rev 2.1)	N3350	Onboard LPDDR4 4GB	LVDS, DDI x 1	18/24bits 1CH LVDS	SATA3 x 2, 64GB eMMC	2.5GbE 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-APL-B10-0003	Type 10(COM.0 Rev 2.1)	E3950	Onboard LPDDR4 8GB	LVDS, DDI x 1	18/24bits 1CH LVDS	SATA3 x 2, 64GB eMMC	2.5GbE 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-APL-B10-0004	Type 10(COM.0 Rev 2.1)	E3940	Onboard LPDDR4 4GB	LVDS, DDI x 1	18/24bits 1CH LVDS	SATA3 x 2, 32GB eMMC	2.5GbE 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-APL-B10-0005	Type 10(COM.0 Rev 2.1)	E3930	Onboard LPDDR4 4GB	LVDS, DDI x 1	18/24bits 1CH LVDS	SATA3 x 2, 16GB eMMC	2.5GbE 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