

## Specifications

System	
Form Factor	3.5" SubCompact Board
CPU	Intel® Pentium® N4200/ Celeron® N3350 Processor SoC
CPU Frequency	Up to 2.5 GHz
Chipset	Intel® Pentium® N4200/ Celeron® N3350 Processor SoC
Memory Type	DDR3L 1866MHz, SODIMM x 1
Max. Memory Capacity	Up to 8GB
BIOS	UEFI
Wake on LAN	Yes
Watchdog Timer	255 Levels
Power Requirement	+12V OR +9~19V (optional)
Power Supply Type	AT/ ATX
Power Consumption (Typical)	Intel® N4200, DDR3L 1600MHz 8GB, 1.57A@ +12V
Dimension (L x W)	5.75" x 4" (146 mm x 101.7 mm)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 81°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	128,000
Certification	CE/FCC
Display	
VGA/LCD Controller	Intel® Atom™ N4200/ N3350 Processor SoC integrate
Video Output	VGA/LVDS/ LVDS2 (co-layout with HDMI, optional)
Backlight inverter supply	Yes
I/O	
Ethernet	Intel® i210/i211, 10/100/1000Base-TX, RJ-45 x 2
Audio	High Definition Audio Interface
USB Port	USB 3.2 Gen 1 x 2 USB 2.0 x 4
Serial Port	RS-232 x 2, RS-232/422/485 x 2
Parallel Port	SPP/EPP/ECP x 1 (Option, Shared with DIO)
HDD Interface	SATA 3.0 x 1 +5V SATA power connector x 1
FDD Interface	—
SSD	mSATA
Expansion Slot	mSATA x 1 (Full-size) MiniCard x 1 (Half-size)
DIO	8-bit
SIM	x 1 (uSIM) (Optional)
TPM	TPM2.0 x 1 (Optional)
Touch	x 1 (Optional)

## Features

- Intel® Pentium® N4200/ Celeron® N3350 Processor SoC
- DDR3L 1866 MHz SODIMM x 1, up to 8 GB
- VGA/LVDS/LVDS2 (HDMI Co-layout with LVDS2 Optional)
- 2 CH Audio, SATA 6.0 Gb/s x 1
- Supports 8-bit Digital I/O, USB 2.0 x 4, USB 3.2 Gen 1 x 2, COM x 4
- Mini Card x 1 (Half-size), mSATA x 1 (Full size)
- DC 12V Only or +9~19V (Optional), AT/ATX Mode
- Supports TPM (Optional)
- 4/5/8-wire Resistive Touch Screen Controller (Optional)



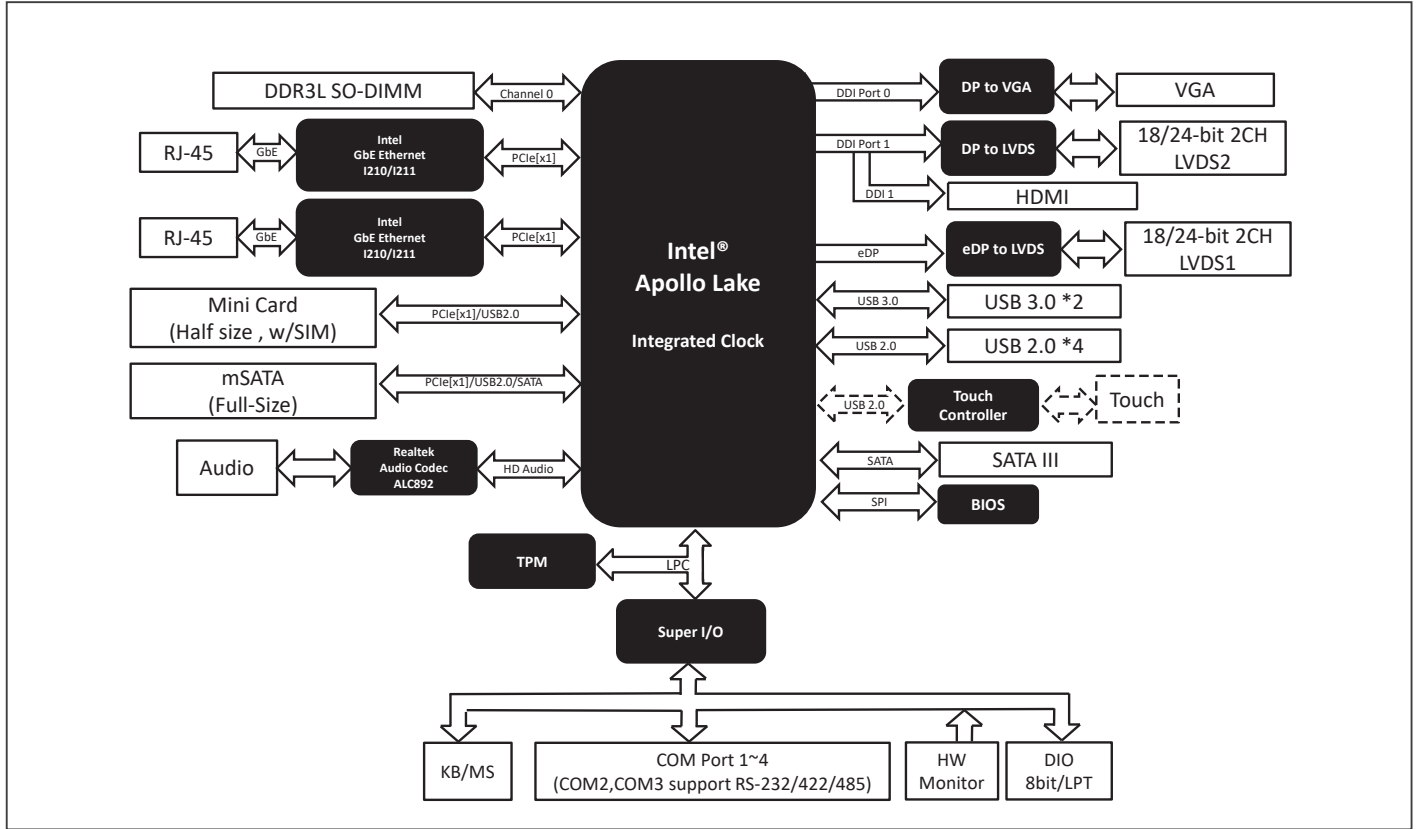
## Packing List

- GENE-APL5 with Heatsink

## Optional Accessories

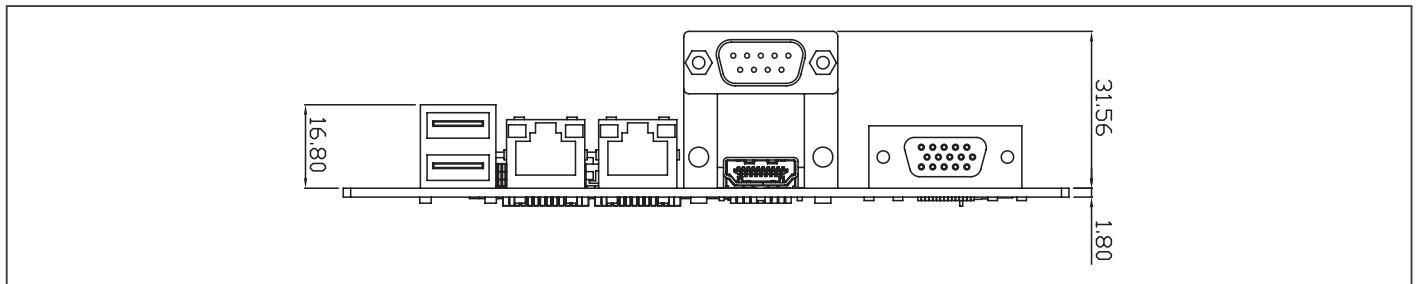
Part Number	Description	QTY
1700050207	(TF) USB CABLE.1*5P Pitch=1.25mm Housinh.20cm.for PFM-945C	4
1701090150	(TF) Flat Cable.D-Sub 9(M).9P Housing.9P 1.25mm pitch Housing.15cm	3
1709100254	(TF) PHONE JACK Cable.3P AUDIO JACK.1*10P 1.25mm HOUSING(F).25cm	1
1709070500	(TF) SATA CABLE.7P Pitch 1.27mm.50cm	1
1701260200	(TF) Flat Cable.25P D-SUB FEMALE.26P 2.00mm Pitch Housing.20cm	1
170204010R	(TF) Power Cable.Double 4P 5.08mm Housing(M).10cm	1
1702150155	(TF) Power Cable.15P SATA(F).2P 2.0mm Housing(PH).15cm	1
170220020B	(TF) Power Cable.20P ATX(M).4P 5.08mm Housing(F).+3P 2.5mm Housing(XH).20cm	1
1700060157	(TF) Cable.6P 2.0mm Housing.6P JACK W/SCREW KB&MS.15cm	1

### Block Diagram



### Dimension

Unit: mm



### Ordering Information

Part Number	CPU	Fan/Fanless	Display	LVDS	Storage	LAN	USB	RS-232	RS-232/422/485	Expansion Slot	Power	Power Temp	Others
GENE-APL5-A11-0001	N3350	Fanless	VGA/LVDS	24bit,2CH	SATA x 1, mSATA x 1 (Full-size)	GbE x 2	USB 3.2 Gen 1 x 2, USB 2.0 x 4	2	2	MiniCard x 1 (half size)	12V	0°C – 60°C	DIO x 8
GENE-APL5-A11-0002	N3350	Fanless	VGA/LVDS/LVDS2	24bit,2CH	SATA x 1, mSATA x 1 (Full-size)	GbE x 2	USB 3.2 Gen 1 x 2, USB 2.0 x 4	2	2	MiniCard x 1 (half size)	9–19V	0°C – 60°C	Touch Controller, SIM, TPM, DIO x 8