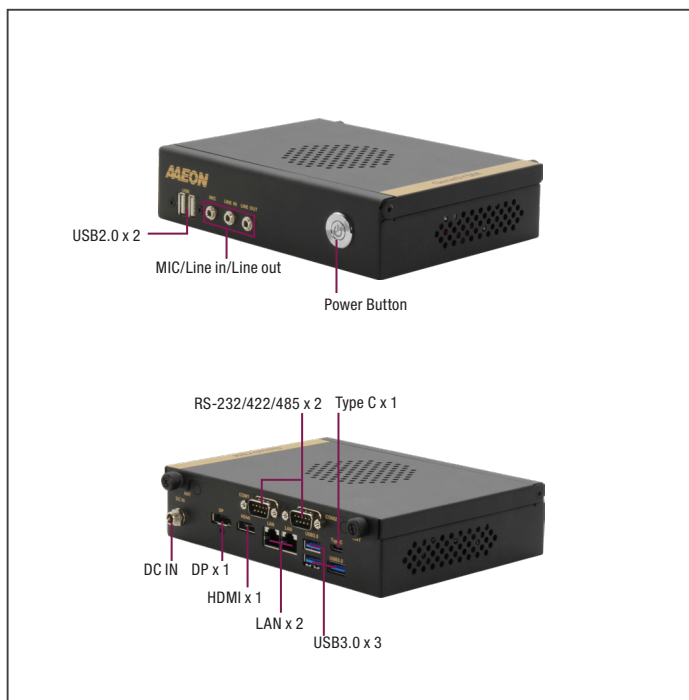


# GENESYSM-ADP6 PRELIMINARY

3.5" SubCompact Board System with 12th Generation Intel® Core™ i7/i5/i3/Celeron® Processor SoC



## Features

- 12th Gen Intel® Core™ i7/i5/i3/Celeron Processor
- DDR5 4800MHz SODIMM x 2, up to 64GB
- DP 1.4 x 1, HDMI 2.0 x 1, Type C DP x 1
- 2.5GbE x 1, GbE x 1, SATA III x 1, DIO x 8bit
- USB 3.2 Gen2 x 3, USB 2.0 x 2, USB Type C x 1
- M.2 2280 M key x 1, M.2 2230 E key x 1, M.2 3052 x 1
- Wide DC Input 9-36V



SERIAL PORT	COM1, COM2 (RS232/422/485, supports 5V/12V/RI)
VIDEO	HDMI 2.1 x 1 DP1.4a x 1
<b>INTERNAL I/O</b>	
USB	—
SERIAL PORT	—
VIDEO	—
SATA	SATA III x 1 +5V SATA Power Connector x 1
AUDIO	Audio Header x 1
DIO/GPIO	8 Bits
SMBus/I2C	SMBus/I2C x1 (Default: SMBus)
TOUCH	—
FAN	4pins Smart Fan x 1
SIM	Nano SIM x 1
FRONT PANEL	HDD LED, PWR LED, Power Button, Buzzer, Reset
OTHERS	—
<b>EXPANSION</b>	
Mini PCI-E/mSATA	—
M.2	M-Key 2280 x 1 (PCIe x4 Gen4) B-Key 3052/3042/2242 x 1 (PCIe x2, USB3.2+SATA, USB2.0, default: USB3.2+SATA) E-Key 2230 x 1 (PCIe, USB2.0)
OTHERS	—
<b>ENVIRONMENT &amp; CERTIFICATION</b>	
OPERATING TEMP.	32°F ~ 122°F (0°C ~ 50°C) 0.5 m/s air flow
STORAGE TEMP.	-40°F ~ 185°F (-40°C ~ 85°C)
OPERATING HUMIDITY	0% ~ 90% relative humidity, non-condensing
MTBF (HOURS)	344,735
EMC	CE/FCC Class A

## Specifications

<b>SYSTEM</b>	
FORM FACTOR	3.5" SubCompact Board System
CPU	Intel® 12th Generation Core™/Celeron CPU i7-1270PE (12C/16T, 3.30GHz, up to 4.50GHz, TDP 28W, up to 64W) i5-1250PE (12C/16T, 3.20GHz, up to 4.40GHz, TDP 28W, up to 64W) i3-1220PE (8C/12T, 3.10GHz, up to 4.20GHz, TDP 28W, up to 64W)
CHIPSET	Integrated with Intel® SoC
MEMORY TYPE	DDR5 4800 MHz, Dual Channel SODIMM x 2, up to 64GB
BIOS	UEFI
WAKE ON LAN	Yes
WATCHDOG TIMER	255 Levels
SECURITY	TPM2.0 (NPCT750AABYX)
RTC BATTERY	Lithium Battery 3V/240mAh
DIMENSION	7.00" x 5.28" x 1.69" (178mm x 134.1mm x 43mm)
OS SUPPORT	Windows 10/11 (64bit) Linux Ubuntu 20.04/Kernel 5.15
<b>POWER</b>	
POWER REQUIREMENT	+9-36V
POWER SUPPLY TYPE	ATX
CONNECTOR	DC Jack Connector
POWER CONSUMPTION	Intel® Core™ i7-1270 PE, DDR5 32GB x 2, 5.72A@ +12V(TYPICAL) Intel® Core™ i7-1270 PE, DDR5 32GB x 2, 7.95A@ +12V(MAX)
<b>DISPLAY</b>	
CONTROLLER	Intel® Iris® Xe Graphics Intel® UHD Graphics
LVDS/eDP	—
DISPLAY INTERFACE	HDMI 2.1 x 1, up to 8K x 4K@60Hz or 4K2K 120Hz DP1.4a (Support DP++) x 1, up to 7680 x 4320 60Hz 30bpp Type C DP1.4a
MULTIPLE DISPLAY	Up to 3 Simultaneous Displays
<b>AUDIO</b>	
CODEC	Realtek ALC897
AUDIO INTERFACE	Line-in/Line-out/MIC
SPEAKER	—
<b>EXTERNAL I/O</b>	
ETHERNET	Intel® i219, 10/100/1000Base Intel® i226, 10/100/2500Base
USB	USB3.2 Gen 2 x 3 USB Type C x 1 (USB4.0, DP1.4a, PD 5W/3A) USB2.0 x 2

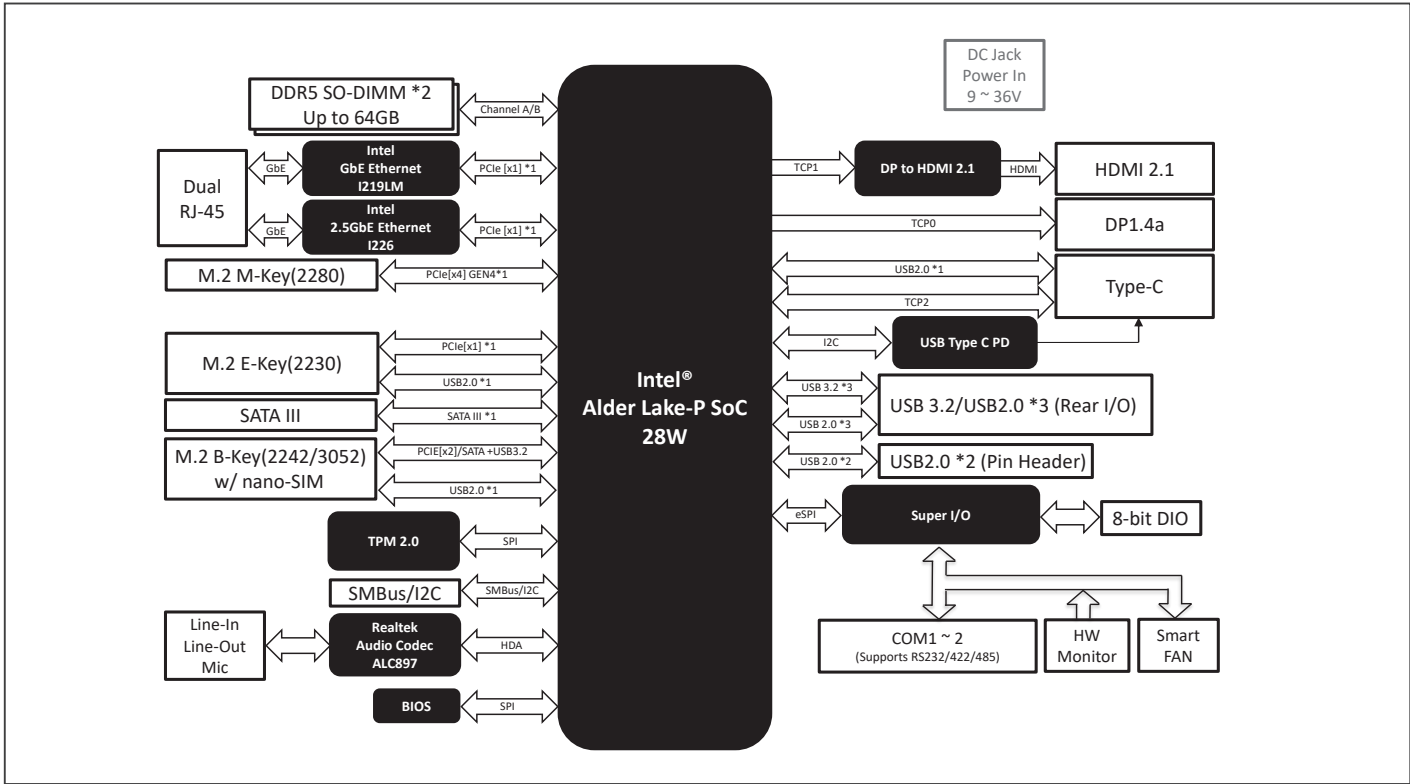
## Optional Accessories

Part Number	Description	QTY per Board
1702031802	Power Cord (US Type)	1
1702031803	Power Cord (Europe Type)	1
170203180E	Power Cord (Japan)	1
1255X00063	Power Adapter 12V/12.5A 150W w/Lock 180D.DELTA.DPS-150AB-15 J	1
GENESYSM-ADP6-HDD1	HDD Kit. For GENESYSM-ADP6	1
GENESYSM-ADP6-VESA1	VESA Mount Kit. For GENESYSM-ADP6	1
GENESYSM-ADP6-WMT1	Wall Mount Kit. For GENESYSM-ADP6	1

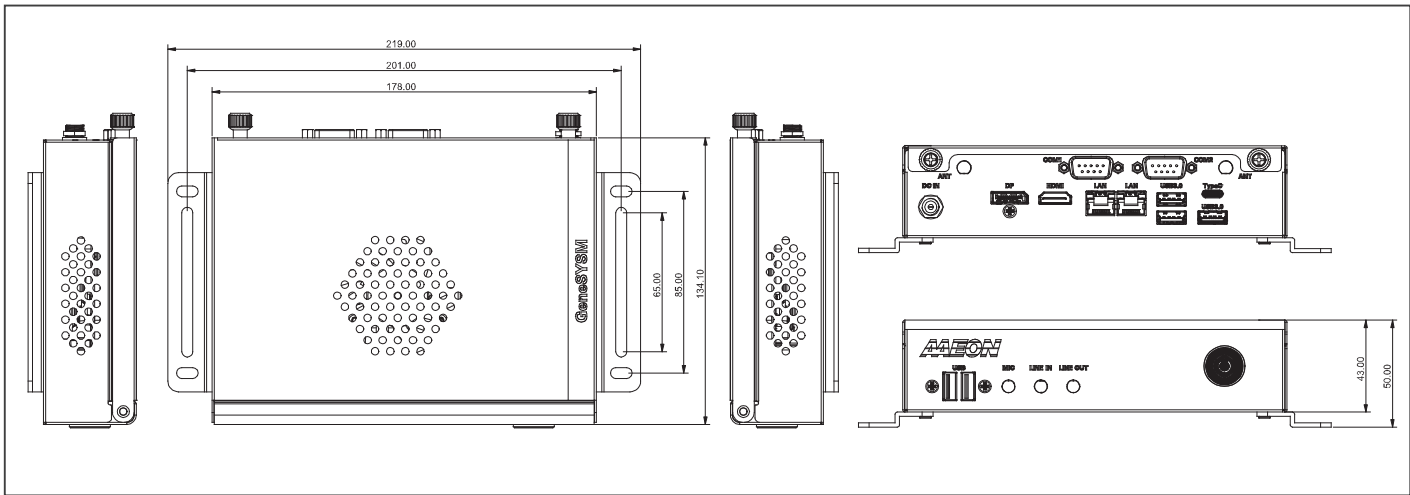
## Packing List

Description	QTY
GENESYSM-ADP6	1

### Block Diagram



### Dimension Unit: mm



### Ordering Information

Part Number	CPU	Fan/Fanless	Display	Storage	LAN	USB	RS-232/422/485	Expansion slot	TPM	Power	Operating Temp	Others
GENESYSM-ADP6-A10-0001	i7-1270PE	Cooler	HDMI x 1 DP x 1 Type C DP x 1	SATA x 1	GbE x 1 2.5GbE x 1	USB 3.2 Gen 2 x 3 USB Type C x 1 USB 2.0 x 2	2	B-Key 3052 x 1 M-Key 2280 x 1 E-Key 2230 x 1	2.0	9~36V	0~50°C	Nano SIM, DIO, SMBUS, Audio
GENESYSM-ADP6-A10-0002	i5-1250PE	Cooler	HDMI x 1 DP x 1 Type C DP x 1	SATA x 1	GbE x 1 2.5GbE x 1	USB 3.2 Gen 2 x 4 USB 3.2 Gen2 TypeC x1 USB 2.0 x 2	2	B-Key 3052 x 1 M-Key 2280 x 1 E-Key 2230 x 1	2.0	9~36V	0~50°C	Nano SIM, DIO, SMBUS, Audio
GENESYSM-ADP6-A10-0003	i3-1220PE	Cooler	HDMI x 1 DP x 1 Type C DP x 1	SATA x 1	GbE x 1 2.5GbE x 1	USB 3.2 Gen 2 x 4 USB 3.2 Gen2 TypeC x1 USB 2.0 x 2	2	B-Key 3052 x 1 M-Key 2280 x 1 E-Key 2230 x 1	2.0	9~36V	0~50°C	Nano SIM, DIO, SMBUS, Audio

Note: All specifications are subject to change without notice.