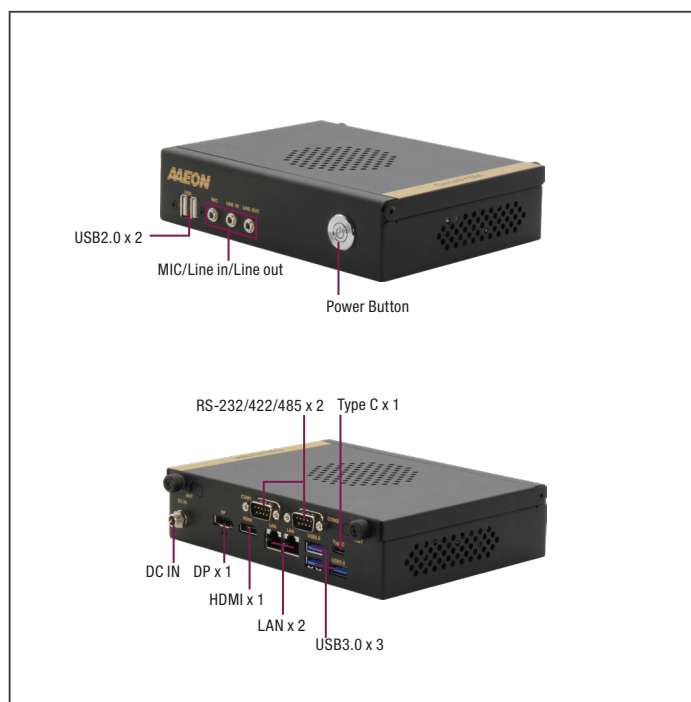


GENESYSM-ADP6

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 4800, Dual Channel 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, GPIO 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 3052/3042/2242 B-Key x 1
- Wide DC Input 9-36V



| | |
|--|--|
| SERIAL PORT | COM1, COM2 (RS232/422/485, supports 5V/12V/RI) |
| VIDEO | HDMI 2.1 x 1 DP 1.4 x 1 |
| INTERNAL I/O | |
| USB | — |
| SERIAL PORT | — |
| VIDEO | — |
| SATA | SATA III x 1 +5V SATA Power Connector x 1 |
| AUDIO | Audio Header x 1 |
| DIO/GPIO | GPIO 8-bit |
| 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 | — |
| EXPANSION | |
| Mini PCI-E/mSATA | — |
| M.2 | M.2 2280 M-Key x 1 (PCIe 4.0 [x4] x 1) M.2 3052/3042/2242 B-Key x 1 (PCIe 3.0 [x2]/SATA + USB 3.2), Default: SATA (selected by BOM) M.2 2230 E-Key x 1 (PCIe 3.0 [x1] + USB 2.0) |
| OTHERS | — |
| ENVIRONMENT & CERTIFICATION | |
| 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

| | |
|---------------------|---|
| SYSTEM | |
| FORM FACTOR | 3.5" SubCompact Board System |
| CPU | Intel® 12th Generation Core™/Celeron CPU Intel® Core™ i7-1270PE (4PC+8EC/16T, 1.80 GHz, 28W) Intel® Core™ i5-1250PE (4PC+8EC/16T, 1.70 GHz, 28W) Intel® Core™ i3-1220PE (4PC+4EC/12T, 1.50 GHz, 28W) |
| 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 |
| POWER | |
| 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) |
| DISPLAY | |
| 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 DP 1.4 x 1, up to 7680 x 4320@60Hz 30bpp (support DP++) Type-C x 1 (USB 3.2 Gen 2, DP 1.4, PD 5V/3A) |
| MULTIPLE DISPLAY | Up to 3 Simultaneous Displays |
| AUDIO | |
| CODEC | Realtek ALC897 |
| AUDIO INTERFACE | Line-in/Line-out/MIC |
| SPEAKER | — |
| EXTERNAL I/O | |
| ETHERNET | Intel® i219, 10/100/1000Base Intel® i226, 10/100/2500Base |
| USB | USB3.2 Gen 2 x 3 USB Type-C x 1 (USB 3.2 Gen 2, DP 1.4, PD 5V/3A) USB2.0 x 2 |

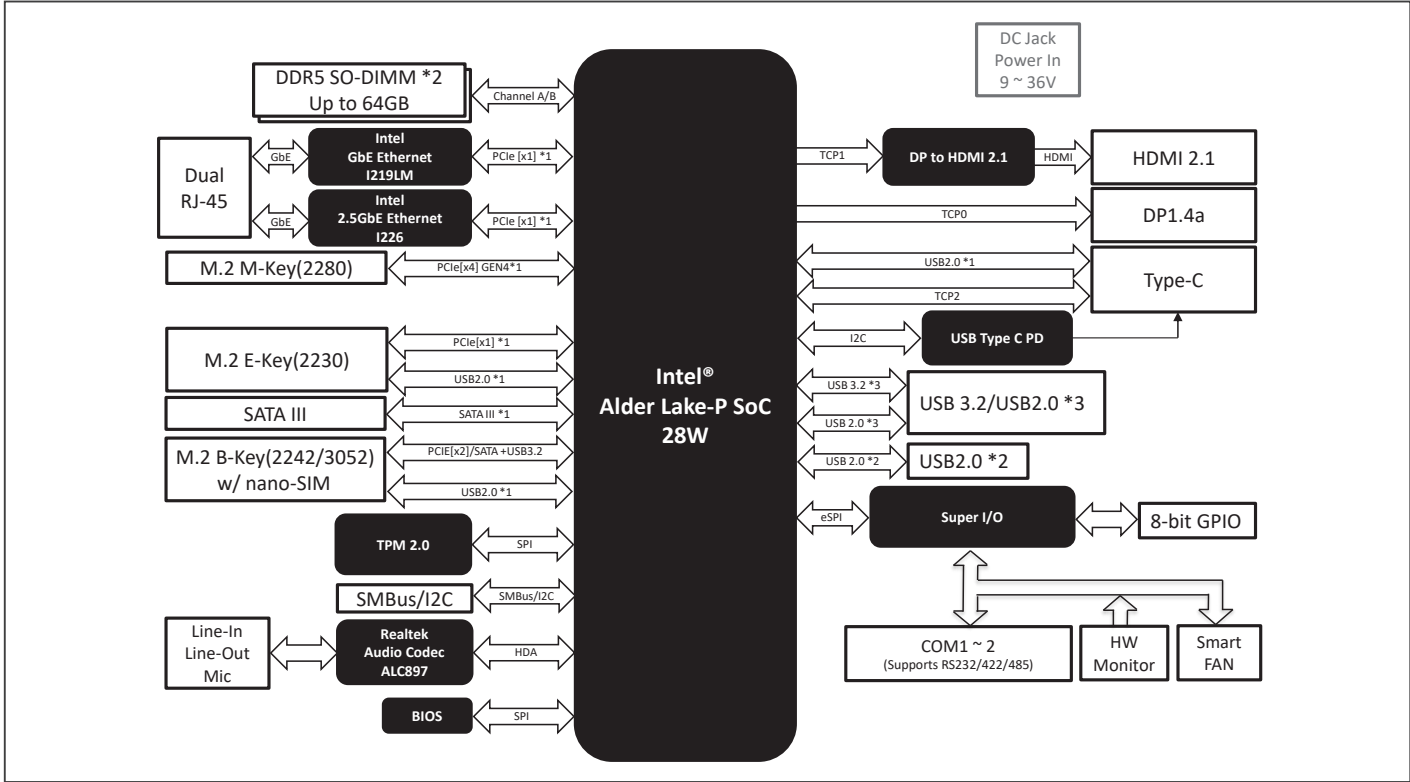
Optional Accessories

| 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 12W/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 |

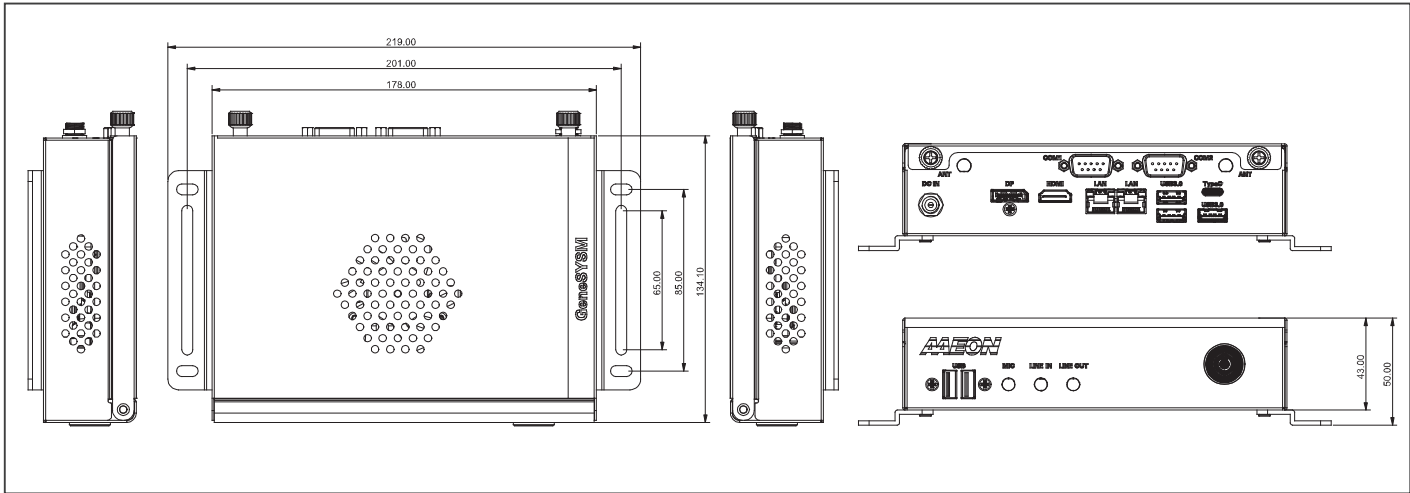
Packing List

| 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 | M.2 2280 M-Key x 1 M.2 3052 B-Key x 1 M.2 2230 E-Key x 1 | 2.0 | 9~36V | 0~50°C | Nano SIM, GPIO, 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 3 USB Type C x 1 USB 2.0 x 2 | 2 | M.2 2280 M-Key x 1 M.2 3052 B-Key x 1 M.2 2230 E-Key x 1 | 2.0 | 9~36V | 0~50°C | Nano SIM, GPIO, 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 3 USB Type C x 1 USB 2.0 x 2 | 2 | M.2 2280 M-Key x 1 M.2 3052 B-Key x 1 M.2 2230 E-Key x 1 | 2.0 | 9~36V | 0~50°C | Nano SIM, GPIO, SMBUS, Audio |

Note: All specifications are subject to change without notice.