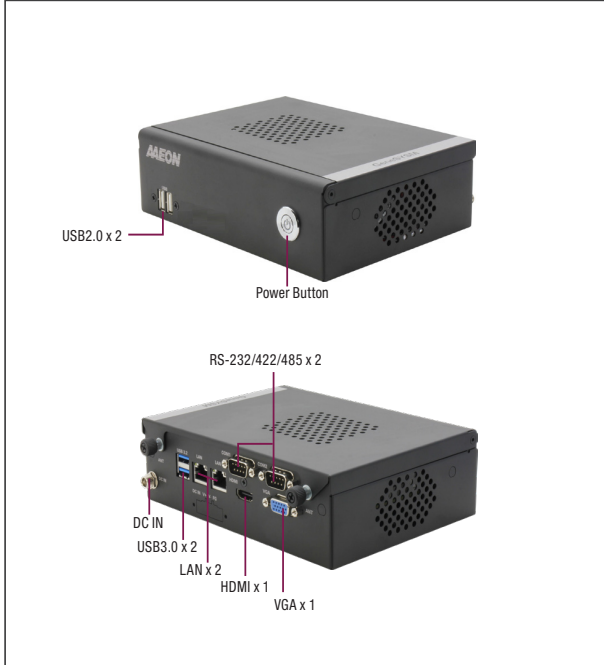


# GENESYSM-EHL5

GENE System with Intel Atom® x6000E Series, and Intel® Pentium® and Celeron® N and J Series Processors

GENE System



## Features

- DDR4 SODIMM Slot x 1, up to 32GB, support IBCEC
- HDMI 2.0b x 1, VGA x 1
- SATA 6.0Gbp x 1, eMMC 32GB x 1
- USB 3.2 Gen2 x 2, USB2.0 x 2
- M.2 2280 B-Key x 1, M.2 2242 B-Key x 1, M.2 2230 E-Key x 1, M.2 3052 B-Key x 1
- Wide DC Input 9-36V



Video	HDMI 2.0 x 1 VGA x 1
<b>Internal I/O</b>	
USB	—
Serial Port	—
Video	—
SATA	SATA 6Gb/s x 1 +5V SATA Power Connector x 1
Audio	Audio Header x 1
DIO/GPIO	GPIO 16-bit (Optional: with E-Base)
SMBus/I2C	SMBus/I2C x 1 (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	eMMC5.1 32GB
<b>Expansion</b>	
Mini PCIe/mSATA	—
M.2	M.2 2230 E-Key x 1 (PCIe 3.0 [x1] + USB 2.0) M.2 2242 B-Key x 1 (PCIe 3.0 [x2]/SATA, Default: PCIe [x2]) M.2 2280 B-Key x 1 (PCIe 3.0 [x1] + USB 2.0) M.2 3052 B-Key x 1 (USB 3.2 Gen 2)
Others	—
<b>Environment &amp; Certification</b>	
Operating Temp.	32°F ~ 122°F (0°C ~ 50°C) with 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)	335,427
EMC	CE/FCC Class A

## Specifications

<b>System</b>	
Form Factor	3.5" SubCompact Board System
CPU	Intel Atom® x6000E series, Pentium®, and Celeron® N and J series Processors: Intel Atom® x6425E (4C/4T, 2.00 GHz, 12W) Intel® Celeron® Processor J6412 (4C/4T, 2.00 GHz, 10W) Intel® Celeron® Processor N6210 (2C/2T, 1.20 GHz, 6.5W)
Chipset	Integrated with Intel® SoC
Memory Type	DDR4 up to 3200, Single Channel SODIMM x 1, Max. 32GB, Non-ECC *IBCEC supported by selected SOC
BIOS	UEFI
Wake on LAN	Yes
Watchdog Timer	255 Levels
Security	TPM 2.0
RTC Battery	Lithium Battery 3V/240mAh
Dimensions	7.00" x 5.28" x 2.08" (178mm x 134.1mm x 53mm), Weight 1 kg
OS Support	Windows 10 (64bit) Linux Ubuntu 20.04.3(IOT)/Kernel 5.13
<b>Power</b>	
Power Requirement	+12V/+9-36V
Power Supply Type	ATX
Connector	DC Jack Connector
Power Consumption	Intel Atom® x6425E, DDR4 32GB, 3.26A @+12V (Typical) Intel Atom® x6425E, DDR4 32GB, 3.42A @+12V (Max)
<b>Display</b>	
Controller	Intel® UHD Graphics for 10th Gen Intel® Processors
LVDS/eDP	—
Display Interface	HDMI 2.0 x 1, up to 4K@60Hz VGA x 1, up to 2560 x 1440
Multiple Display	Up to 2 Simultaneous Displays
<b>Audio</b>	
Codec	—
Audio Interface	—
Speaker	—
<b>External I/O</b>	
Ethernet	Intel® I210 1GbE, RJ45 x 2
USB	USB 3.2 Gen 2 x 2 USB 2.0 x 2
Serial Port	COM 1 (RS-232/422/485) COM 2 (RS-232/422/485, supports 5V/12V/R)

## Packing List

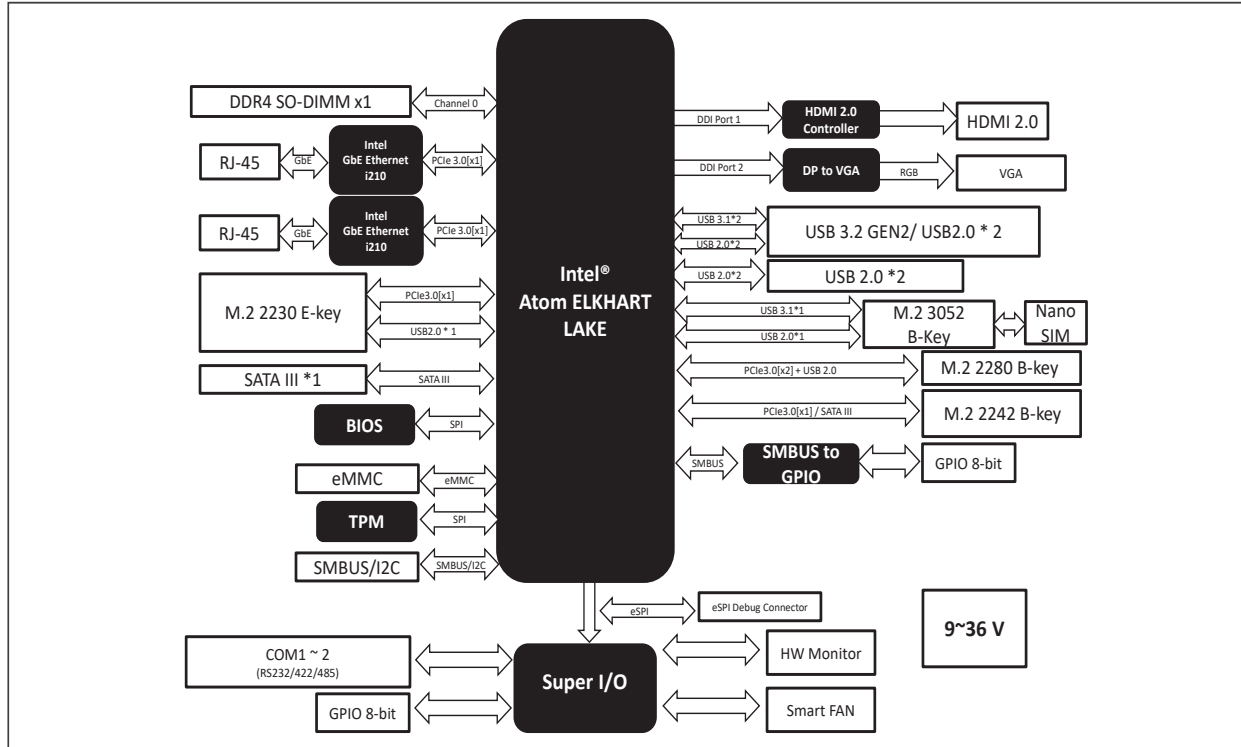
Part Number	Description	QTY
GENESYSM-EHL5	GENESYSM-EHL5 GENE System	1
TH2EHL5010	Heatsink	1
TH5EHL5010	Thermal Pad	4

## 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
125530060Z	Power Adapter. 12V.5A.60W. FSP060-DHAN3	1
GENESYSM-EHL5-HDD1	HDD Kit. For GENESYSM-EHL5	1
GENESYSM-ALL-VESA1	VESA Mount Kit. For GENESYSM-EHL5	1
GENESYSM-ALL-WMT1	Wall Mount Kit. For GENESYSM-EHL5	1

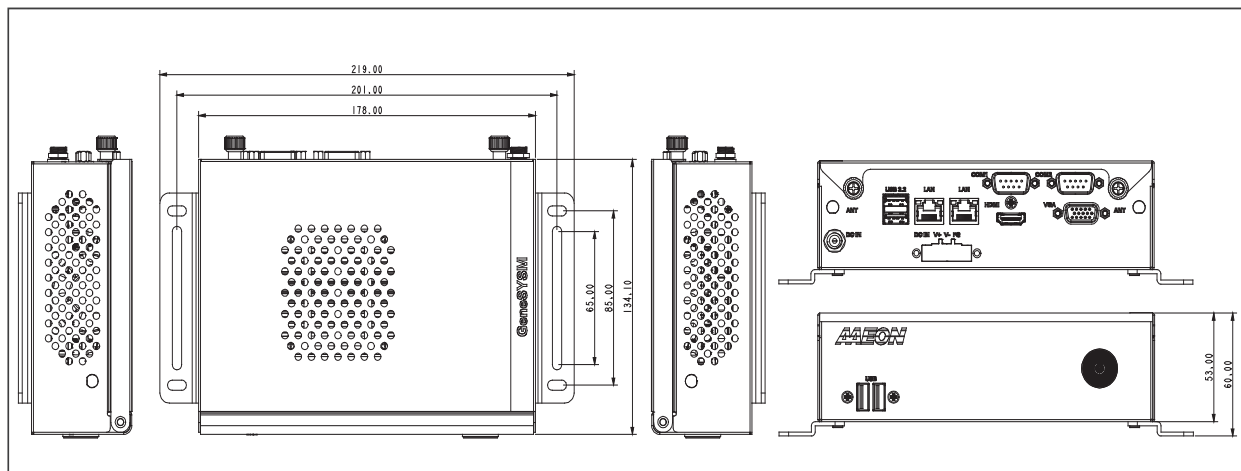
# GENESYSM-EHL5

## 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-EHL5-A10-0001	Intel® Celeron® Processor N6210	Heatsink System Fan	HDMI x1 VGA x1	SATA x1	GbE x2	USB 3.2 Gen 2 x 2 USB 2.0 x 2	2	M.2 E-Key 2230 x1 M.2 B-Key 2242 x1 M.2 B-Key 2280 x1 M.2 B-Key 3052 x1	2.0	12V	0~50°C	Nano SIM, GPIO, SMBUS, TPM
GENESYSM-EHL5-A10-0002	Intel® Celeron® Processor J6412	Heatsink System Fan	HDMI x1 VGA x1	SATA x1	GbE x2	USB 3.2 Gen 2 x 2 USB 2.0 x 2	2	M.2 E-Key 2230 x1 M.2 B-Key 2242 x1 M.2 B-Key 2280 x1 M.2 B-Key 3052 x1	2.0	9~36V	0~50°C	Nano SIM, GPIO, SMBUS, TPM
GENESYSM-EHL5-A10-0003	Intel Atom® x6425E	Heatsink System Fan	HDMI x1 VGA x1	SATA x1 eMMC 32GB	GbE x2	USB 3.2 Gen 2 x 2 USB 2.0 x 2	2	M.2 E-Key 2230 x1 M.2 B-Key 2242 x1 M.2 B-Key 2280 x1 M.2 B-Key 3052 x1	2.0	9~36V	0~50°C	Nano SIM, GPIO, SMBUS, TPM

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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