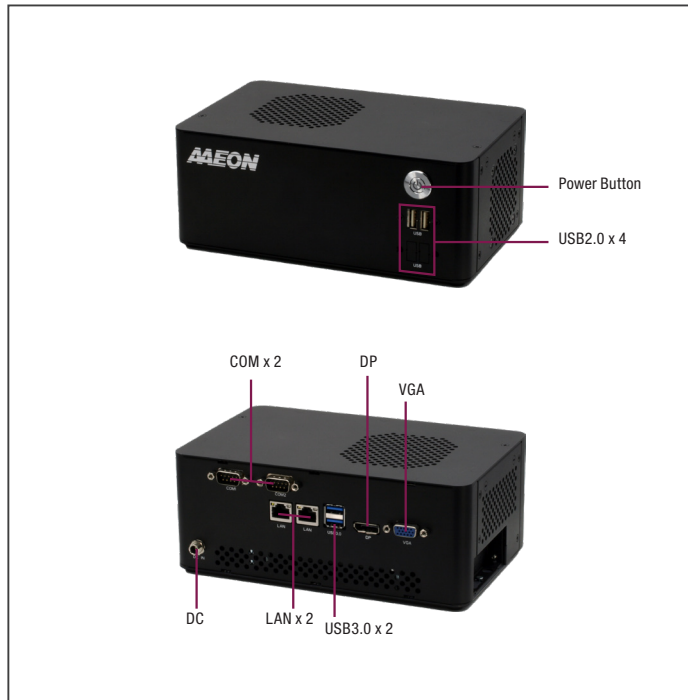


# GENESYS-CML5 PRELIMINARY

3.5" SubCompact Board System with 10th Generation Intel® Core™ i7/i5/i3/Pentium®/Celeron® Processor SoC



## Features

- Non-ECC DDR4 SODIMM Slot x 2, up to 64GB
- GbE x 2, SATA III x 2
- USB 3.2 Gen 2 x 2 (Rear I/O), USB 2.0 x 4 (Optional)
- RS-232/422/485 x 2 (Optional)
- M.2 M Key 2280 PCIe[x4]/SATA[x1] x 1
- PCIe[x4] x 1 (Q470E only)



USB	USB3.2 Gen 2 x 2 (Q470E) USB3.2 Gen1 x 2 (H420E)
SERIAL PORT	COM RS232/422/485 x 2 (Optional)
VIDEO	DP++ x 1, VGA x 1
<b>INTERNAL I/O</b>	
USB	USB2.0 x 4 (Optional)
SERIAL PORT	—
VIDEO	—
SATA	SATA III x 2 +5V SATA Power Connector x 1
AUDIO	—
DIO/GPIO	—
SMBus/I2C	I2C/SMBus x 1 (Optional)
Touch	—
FAN	4pins Smart Fan x1
SIM	—
Front Panel	PWR LED, Power Button
Others	FPC x 1 (Q470E only)
<b>EXPANSION</b>	
Mini PCI-E/mSATA	—
M.2	M-Key 2280 x 1 (PCIe x4, SATA)
Others	—
<b>ENVIRONMENT &amp; CERTIFICATION</b>	
OPERATING TEMP	32°F ~ 122°F (0°C ~ 50°C)
STORAGE TEMP	-40°F ~ 185°F (-40°C ~ 85°C)
OPERATING HUMIDITY	0% ~ 90% relative humidity, non-condensing
MTBF (HOURS)	380,571
EMC	CE/FCC Class A

## Specifications

SYSTEM	
FORM FACTOR	3.5" SubCompact Board System
CPU	Intel® 10th Generation Core™/Pentium/Celeron SoC i7-10700TE (8C/16T, 2.00 GHz, up to 4.40 GHz, TDP 35W) i5-10500TE (6C/12T, 2.30 GHz, up to 3.70 GHz, TDP 35W) i3-10100TE (4C/8T, 2.30 GHz, up to 3.60 GHz, TDP 35W) G6400TE (2C/4T, 3.20 GHz, TDP 35W) G5900TE (2C/2T, 3.00 GHz, TDP 35W)
CHIPSET	Integrated with Intel® SoC
MEMORY TYPE	DDR4 up to 2933MHz Dual Channel, SODIMM x 2, up to 64GB, Non-ECC
BIOS	UEFI
WAKE ON LAN	Yes
WATCHDOG TIMER	255 Levels
SECURITY	TPM2.0
RTC Battery	Lithium Battery 3V/240mAh
DIMENSION	8.27" x 5.28" x 3.23" (210mm x 134mm x 82mm)
OS Support	Windows 10 (64bit) Linux Ubuntu 20.04.1/Kernel 5.4
POWER	
POWER REQUIREMENT	+12V
POWER SUPPLY TYPE	ATX
CONNECTOR	DC Jack Connector
POWER CONSUMPTION	Intel® i7-10700TE, DDR4 3200Mhz 32GB x2, 5.64A @ +12V(Typical) Intel® i7-10700TE, DDR4 3200Mhz 32GB x2, 10.63A @ +12V(Max)
DISPLAY	
CONTROLLER	Intel® HD Graphics 610/630
LVDS/eDP	—
Display Interface	DP++ x 1 VGA x 1
Multiple Display	2 Simultaneous Displays
AUDIO	
CODEC	—
AUDIO INTERFACE	—
Speaker	—
EXTERNAL I/O	
ETHERNET	Intel® i210, 10/100/1000Base, RJ45 x1 Intel® i219, 10/100/1000Base, RJ45 x1 (support vPro on i5/i7 processors with Q470E)

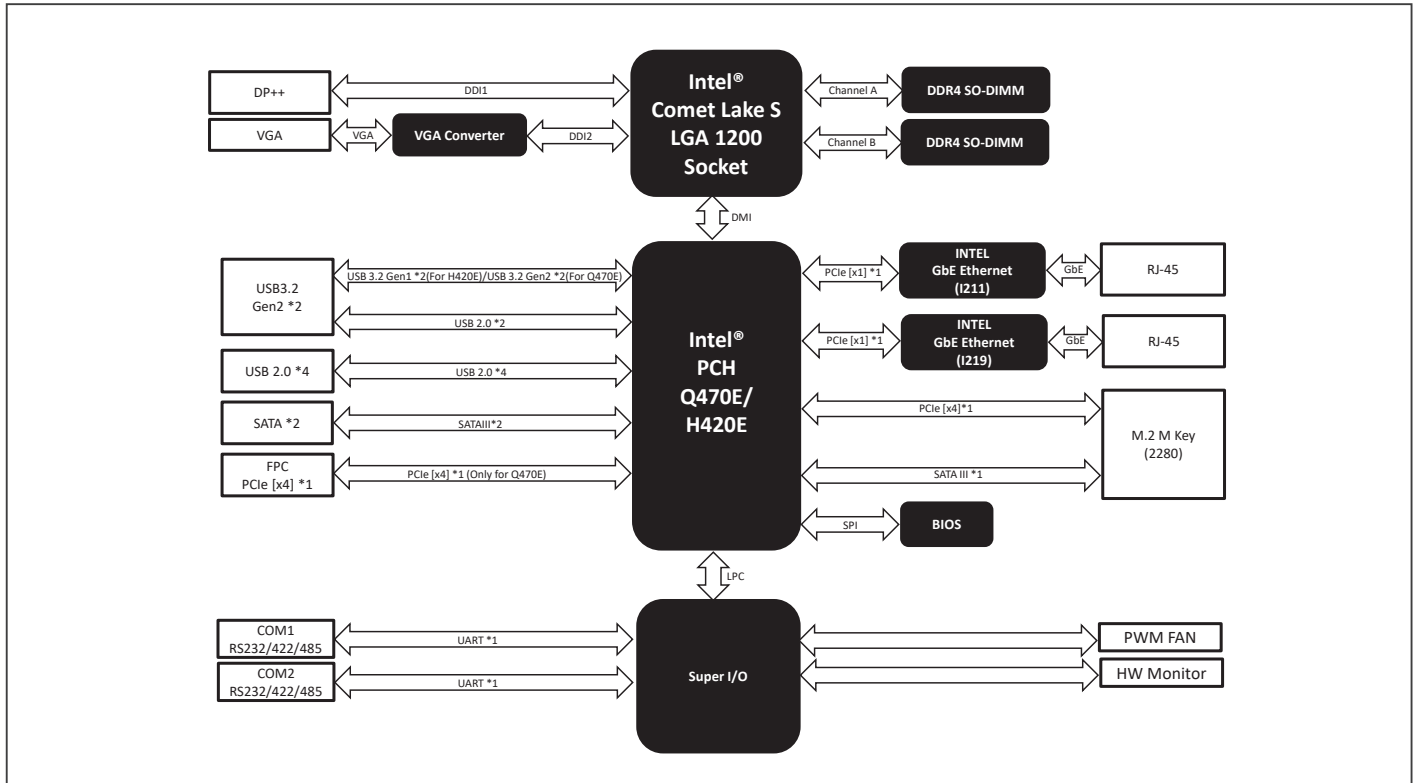
## Optional Accessories

Part Number	Description	QTY
968C128G3N	2.5 SSD.SATA.128GB	1
968D4008GL	8GB.DDR4 2400Mhz.SODIMM	2
1255201200	Power Adapter. 12V.10A.120W	1
1702031802	Power Cord (US)	1
1702031803	Power Cord (Europe)	1
170203180E	Power Cord (Japan)	1
GENESYS-CML5-COM1	COM Port Kit (Single Port)	1
GENESYS-CML5-USB1	USB2.0 Kit (Dual Port)	1
GENESYS-CML5-HDD1	HDD Kit (cable only)	1
GENESYS-CML5-WMT1	Wall Mount Kit.	1
GENESYS-CML5-VESA1	VESA Mount Kit	1

## Packing List

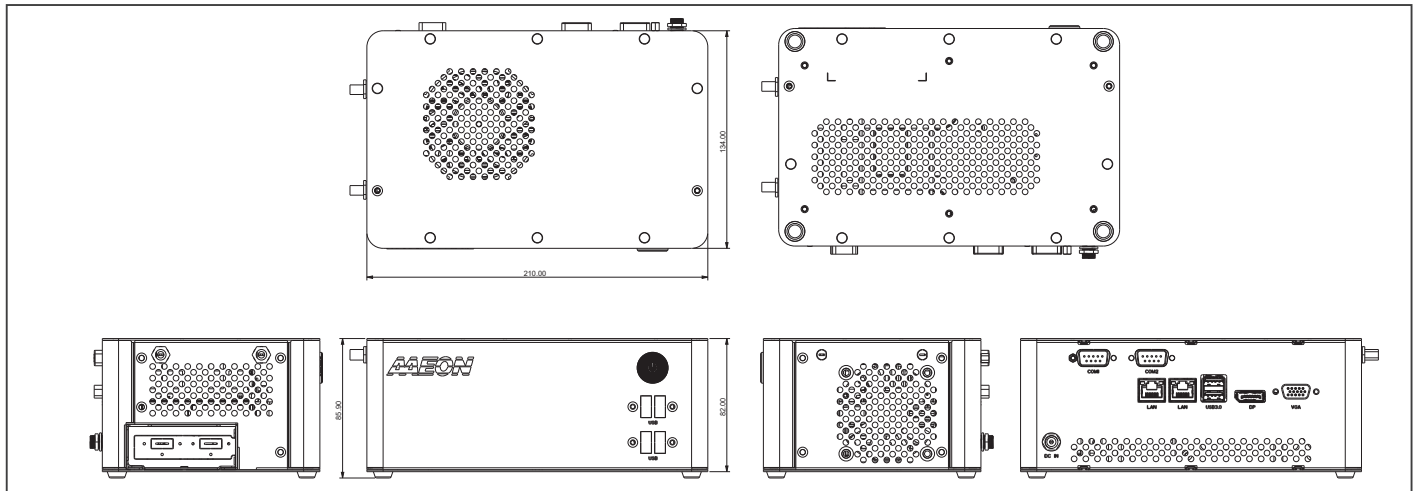
- GENESYS-CML5

## Block Diagram



## Dimension

Unit: mm



## Ordering Information

Part Number	CPU	PCH	Memory	Display	Storage	LAN	USB	RS-232/422/485	Expansion slot	TPM	Power	Operating Temp
GENESYS-CML5-A10-0001	FCLGA1200 (Socket Type, TPD up to 35W)	Q470E	Memory Slot x 2	DP++ x1 VGA x 1	SATA x 1	GbE x 2	USB3.2 Gen2 x 2	0	M.2 2280 M Key x 1 PCIe[x4] x 1 (FPC)	TPM2.0	12V	0°C ~ 50°C
GENESYS-CML5-A10-0002	FCLGA1200 (Socket Type, TPD up to 35W)	H420E	Memory Slot x 2	DP++ x1 VGA x 1	SATA x 1	GbE x 2	USB3.2 Gen2 x 2	0	M.2 2280 M Key x 1	TPM2.0	12V	0°C ~ 50°C
GENESYS-CML5-A10-AI03	FCLGA1200 (Socket Type, TPD up to 35W)	Q470E	DDR4 x 2	DP++ x1 VGA x 1	128GB SSD x 1	GbE x 2	USB3.2 Gen2 x 2 USB2.0 x 4	2	Moviodius2280 x 1	TPM2.0	12V	0°C ~ 50°C