

GENESYSM-TGU6

3.5" SubCompact Board System with 11th Generation Intel® Core™ i7/i5/i3/Celeron CPU



Specifications

SYSTEM	
FORM FACTOR	3.5" SubCompact Board System
CPU	Intel® 11th Generation Core™/Celeron CPU i7-1185G7E (4C/8T, 1.80GHz, up to 4.40GHz, TDP-up 28W) i5-1145G7E (4C/8T, 1.50GHz, up to 4.10GHz, TDP-up 28W) i3-1115G4E (2C/4T, 2.20GHz, up to 3.90GHz, TDP-up 28W) Celeron® 6305E (2C/2T, 1.80GHz, TDP 15W)
CHIPSET	Integrated with Intel® SoC
MEMORY TYPE	DDR4 up to 3200MHz, Dual Channel SODIMM x 2, up to 64GB, Support IB ECC(select SKUs)
BIOS	UEFI
WAKE ON LAN	Yes
WATCHDOG TIMER	255 Levels
SECURITY	TPM2.0
RTC Battery	Lithium Battery 3V/240mAh
DIMENSION	7.00" x 5.28" x 1.97" (178.0mm x 134.1mm x 50.0mm)
OS Support	Windows 10 (64bit) Linux Ubuntu 20.04.3(IOT)/Kernel 5.13
POWER	
POWER REQUIREMENT	+9-36V (Optional: +12V)
POWER SUPPLY TYPE	ATX
CONNECTOR	DC Jack Connector
POWER CONSUMPTION	Intel® i7-1185G7E, DDR4 3200MHz 32GB x 2, 4.96A@ +12V(TYPICAL) Intel® i7-1185G7E, DDR4 3200MHz 32GB x 2, 7.32A@ +12V(MAX)
DISPLAY	
CONTROLLER	Intel® Iris® Xe Graphics Intel® UHD Graphics
LVDS/eDP	—
Display Interface	HDMI 2.0b x 1 DP1.4 x 2 Type-C DP1.4 x 1
Multiple Display	Up to 4 Simultaneous Displays
AUDIO	
CODEC	Realtek ALC897/892
AUDIO INTERFACE	Line-in/Line-out/MIC (Optional)
Speaker	—
EXTERNAL I/O	
ETHERNET	Intel® i219, 10/100/1000Base, RJ-45 x 1 Intel® i225/i226, 10/100/2500Base, RJ-45 x 1

Features

- 11th Gen Intel® Core™ i7/i5/i3/Celeron Processor
- DDR4 SODIMM x 2, up to 64GB
- DP 1.4a x 2, HDMI 2.0b 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 4, USB 2.0 x 2, USB Type C x 1
- M.2 2280 M key x 1, M.2 2230 E key x 1, Full size mSATA/mPCIe x 1
- Wide DC Input 9-36V
- Line-in/Line-out/MIC (Optional)



USB	USB3.2 Gen 2 x 4 USB3.2 Gen 2 Type C x 1 (PD 5V/3A) USB2.0 x 2
SERIAL PORT	COM1 (RS232/422/485) COM2 (RS232/422/485, supports 5V/12V/RI)
VIDEO	HDMI 2.0b x 1, DP1.4 x 2, Type-C DP1.4 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	—
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	Full-Sized mSATA/mPCIe x 1 (default: mSATA, select with BIOS)
M.2	M-Key 2280 x 1 (PCIex4) E-Key 2230 x 1 (PCIe, USB2.0)
Others	—
ENVIRONMENT & CERTIFICATION	
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)	329,884
EMC	CE/FCC Class A

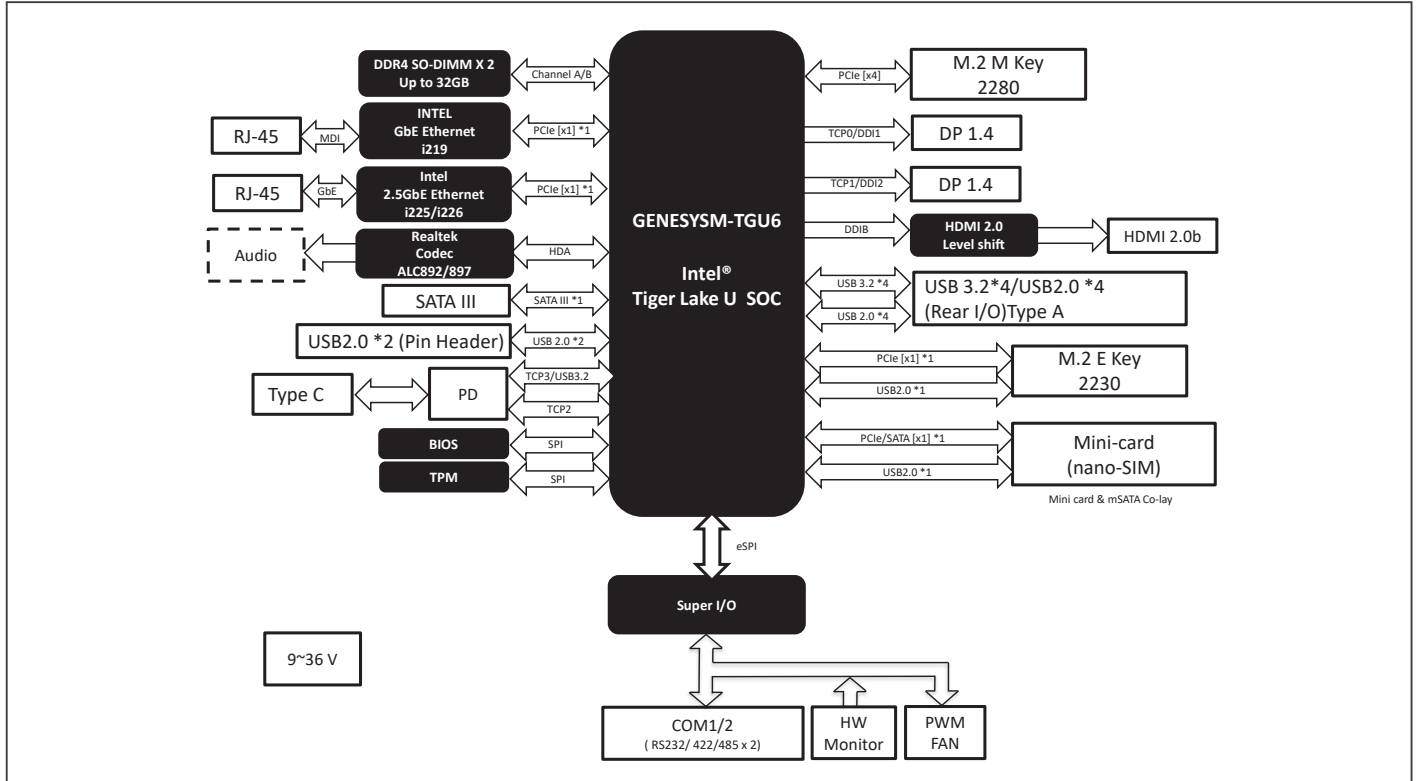
Packing List

- GENESYSM-TGU6 x 1

Optional Accessories

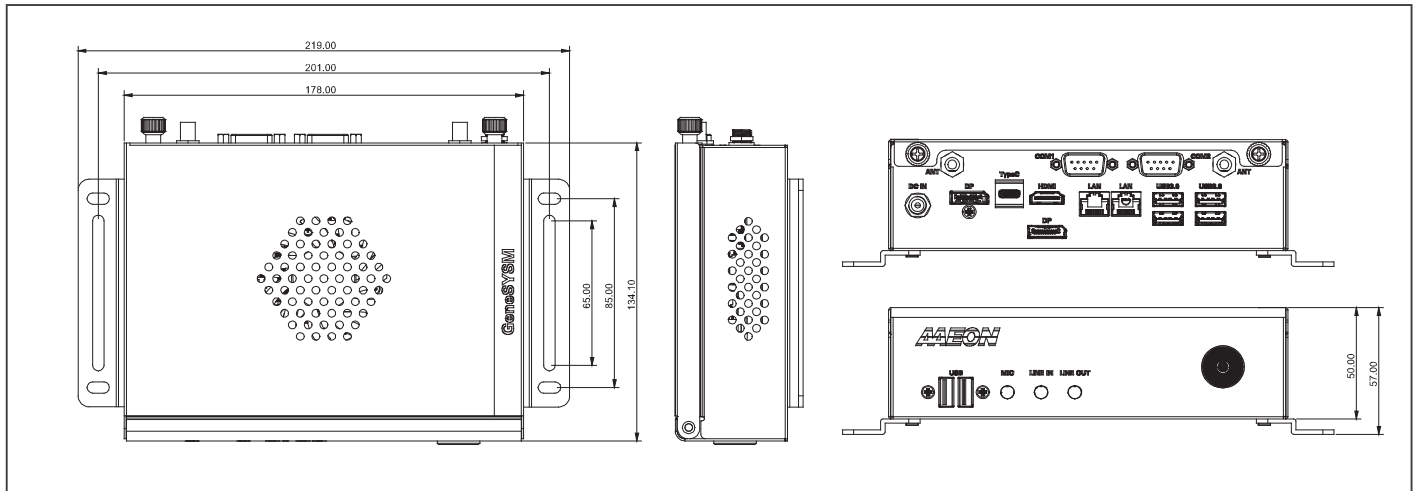
Part Number	Description	QTY
1702031802	Power Cord (US Type)	1
1702031803	Power Cord (Europe Type)	1
170203180E	Power Cord (Japan)	1
170X000517	Audio cable	1
1255201200	Power Adapter 12V/10A 120W FSP120-AHAN3/9NA1206701	1
GENESYSM-TGU6-HDD1	HDD Kit. For GENESYSM-TGU6	1
GENESYSM-TGU6-VESA1	VESA Mount Kit. For GENESYSM-TGU6	1
GENESYSM-TGU6-WMT1	Wall Mount Kit. For GENESYSM-TGU6	1

Block Diagram



Dimension

Unit: mm



Ordering Information

Part number	CPU	Fan/Fanless	Display	LAN	USB	RS-232/422/485	Storage	Expansion slot	TPM	Power	Operating Temp	Others
GENESYSM-TGU6-A10-0001	i7-1185G7E	Cooler	DP x 2, TypeC DP x 1 HDMI x 1	GbE x 1 2.5GbE x 1	USB 3.2 Gen 2 x 4 USB 3.2 Gen2 TypeC x 1 USB 2.0 x 2	2	SATA x 1 mSATA (Full size)x 1	M.2 M Key 2280 x 1 M.2 E Key 2230 x 1	2.0	9~36V	0~50°C	nano SIM
GENESYSM-TGU6-A10-0002	i5-1145G7E	Cooler	DP x 2, TypeC DP x 1 HDMI x 1	GbE x 1 2.5GbE x 1	USB 3.2 Gen 2 x 4 USB 3.2 Gen2 TypeC x 1 USB 2.0 x 2	2	SATA x 1 mSATA (Full size)x 1	M.2 M Key 2280 x 1 M.2 E Key 2230 x 1	2.0	9~36V	0~50°C	nano SIM
GENESYSM-TGU6-A10-0003	i3-1115G4E	Cooler	DP x 2, TypeC DP x 1 HDMI x 1	GbE x 1 2.5GbE x 1	USB 3.2 Gen 2 x 4 USB 3.2 Gen2 TypeC x 1 USB 2.0 x 2	2	SATA x 1 mSATA (Full size)x 1	M.2 M Key 2280 x 1 M.2 E Key 2230 x 1	2.0	9~36V	0~50°C	nano SIM
GENESYSM-TGU6-A10-0004	Celeron® 6305E	Cooler	DP x 2, TypeC DP x 1 HDMI x 1	GbE x 1 2.5GbE x 1	USB 3.2 Gen 2 x 4 USB 3.2 Gen2 TypeC x 1 USB 2.0 x 2	2	SATA x 1 mSATA (Full size)x 1	M.2 M Key 2280 x 1 M.2 E Key 2230 x 1	2.0	9~36V	0~50°C	nano SIM