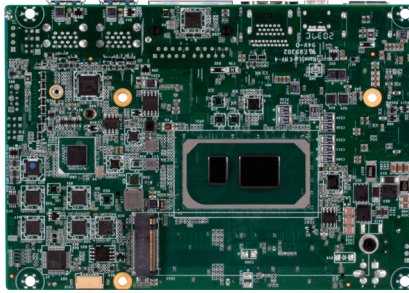
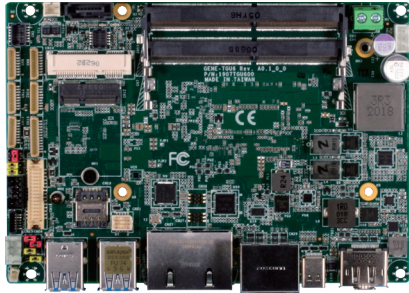


3.5" SubCompact Board with 11th Generation Intel® Core™ i7/i5/i3/Celeron® Processor SoC



Specifications

System	
Form Factor	3.5" SubCompact Board
CPU	Intel® 11th Generation Core™ i7/i5/i3/Celeron SoC i7-1185G7E (4C, 1.7GHz, up to 4.4GHz, TDP-up 28W) i5-1145G7E (4C, 1.5GHz, up to 4.1GHz, TDP-up 28W) i3-1115G4E (2C, 2.2GHz, up to 3.9GHz, TDP-up 28W) Celeron® 6305E (2C, 1.80GHz, TDP 15W)
CPU Frequency	Up to 4.4GHz
Chipset	Integrated SoC
Memory Type	DDR4 3200MHz SODIMM x2 (Dual Channel ,Non-ECC)
Max. Memory Capacity	Up to 64GB
BIOS	AMI UEFI
Wake on LAN	Yes
Watchdog Timer	255 Levels
Power Requirement	+9 ~ 36V (Optional: +12V)
Power Supply Type	AT/ATX (Default: AT)
Power Consumption (Typical)	TBD
Dimension (L x W)	5.75" x 4" (146mm x 101.7mm)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-4°F-176°F (-20°C ~ 80°C)
Operating Humidity	0-90% @ 40°C, non-condensing
MTBF (Hours)	TBD
Certification	CE/FCC Class A

Features

- Intel® Core™ i7/i5/i3/Celeron Processor SoC
- Non-ECC DDR4 SODIMM Slot x 2, up to 64GB
- LVDS/eDP x 1 (Default: LVDS), DP 1.4a x 2, HDMI 2.0b x 1
- 2.5GbE x 1, GbE x1, SATA III x 1, DIO x 8bit
- USB 3.2 Gen 2 x 4 (Rear I/O), USB2.0 x 2 (Pin header), USB Type C x 1
- RS-232/422/485 x 4
- Full size mSATA/mPCIe x 1 with Nano-SIM (mSATA as default, select by BIOS)
- M.2 2280 M key x 1, M.2 2230 E key x 1
- Wide DC Input 9-36V (Optional: 12V Only)



Display	
VGA/LCD Controller	Intel® Iris® Xe Graphics Intel® UHD Graphics for 11th Gen Intel® Processors
Video Output	DP 1.4a x 2 HDMI 2.0b x 1 Dual Channel 18/24bit LVDS/eDP x 1 (Default: LVDS)
Backlight Inverter supply	Max 12V, 2A
I/O	
Ethernet	Intel® i219-LM, 10/100/1000Base, RJ45 x 1 (Support Vpro) Intel® i225-LM, 10/100/1000/2500Base, RJ45 x 1 (Support Vpro)
Audio	High Definition Audio Interface, Line-in/Line-out/MIC (Without Amplifier)
USB Port	USB3.2 GEN2 x 4 (Rear I/O) USB3.2 GEN2 Type C x 1 (Rear I/O) USB2.0 x 2 (Pin header)
Serial Port	RS-232/422/485 x 4 (COM2 support 5V/12V/RI)
Parallel Port	—
HDD Interface	—
FDD Interface	—
SSD	SATA 3.0 x 1 SATA power connector x 1(+5V)
Expansion Slot	Full size mSATA/mPCIe x 1 With Nano-SIM (mSATA as default, select by BIOS) M.2 E key 2230x 1 (For WIFI/BT, PCIe/USB signal only) M.2 M key 2280 PCIe x 4
DIO	8bit
SIM	x1(NANO-SMI)
TPM	TPM 2.0
Touch	x1
Others	SMBUS x1, I2C x1 (Optional)

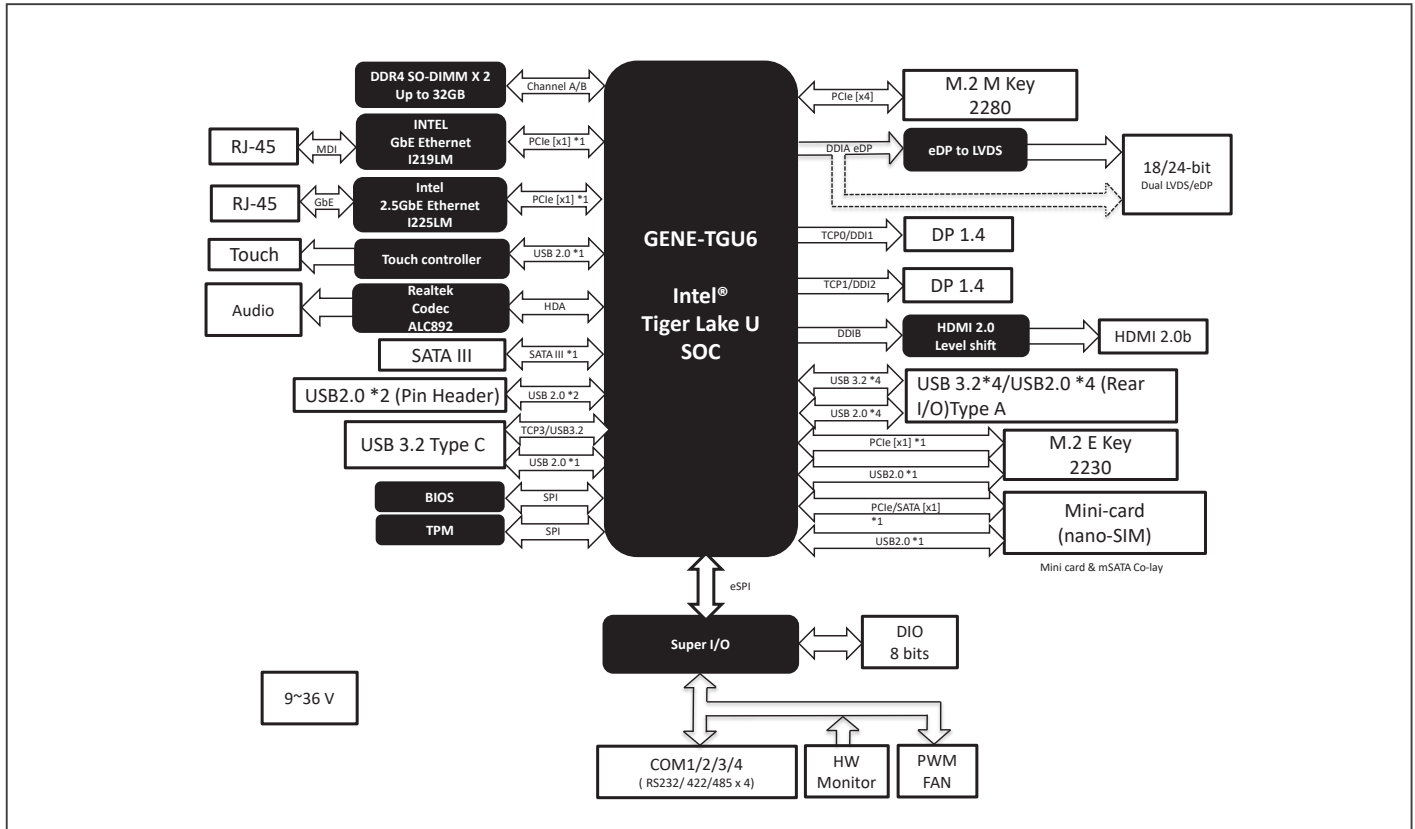
Packing List

- GENE-TGU6 with Heatspreader

Optional Accessories

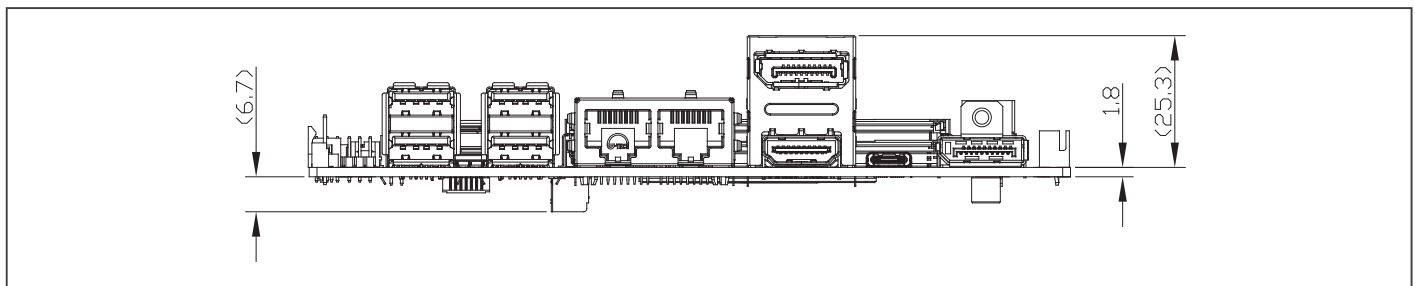
Part Number	Description	QTY
1702150155	(TF)Power Cable.15P SATA(F).2P 2.0mm Housing(PH).15cm	1
1709070500	(TF)SATA CABLE.7P Pitch 1.27mm.50cm	1
1702002010	(TF)Power CABLE.1*2P Pitch=5.0mm Housing.10cm.for PFM-945C.(12V only)	1
1709100254	(TF)PHONE JACK Cable.3P AUDIO JACK.1*10P 1.25mm HOUSING(F).25cm	1
170220020B	(TF)Power Cable.20P ATX(M).4P 5.08mm Housing(F).+3P 2.5mm Housing (XH).20cm	1
170X000156	(TF)Cable.12P.Pitch=1.0mm.250mm.FLYINGWAY.FWAA-1345.Audio cable	1
170010010D	USB cable (2 Port), 10cm	1
TBD	COM Cable	2
TBD	CPU Cooler	1

Block Diagram



Dimension

Unit: mm



Ordering Information

Part Number	CPU	Fan/ Fanless	Display	LVDS	Storage	LAN	USB	RS-232	RS-232/ 422/485	Expansion Slot	Power	Power Temp	Others
TBD	11th Gen. Intel® Core™ i3	Fan	2DP+HDMI+LVDS	18/24-bit, 2CH	SATA x 1 mSATA (Full size)x 1	GbE x 1 2.5GbE x 1	USB 3.2 Gen 2 x 4 USB 3.2 Gen 2 Type C x 1 USB 2.0 x 2	—	4	M.2 M Key 2280 PCIe(x4) x 1 M.2 E Key 2230 x 1	9 ~ 36V	0°C ~ 60°C	DIO x 8, nano SIM, Touch Controller, TPM
TBD	11th Gen. Intel® Core™ i5	Fan	2DP+HDMI+LVDS	18/24-bit, 2CH	SATA x 1 mSATA (Full size)x 1	GbE x 1 2.5GbE x 1	USB 3.2 Gen 2 x 4 USB 3.2 Gen 2 Type C x 1 USB 2.0 x 2	—	4	M.2 M Key 2280 PCIe(x4) x 1 M.2 E Key 2230 x 1	9 ~ 36V	0°C ~ 60°C	DIO x 8, nano SIM, Touch Controller, TPM
TBD	11th Gen. Intel® Core™ i7	Fan	2DP+HDMI+LVDS	18/24-bit, 2CH	SATA x 1 mSATA (Full size)x 1	GbE x 1 2.5GbE x 1	USB 3.2 Gen 2 x 4 USB 3.2 Gen 2 Type C x 1 USB 2.0 x 2	—	4	M.2 M Key 2280 PCIe(x4) x 1 M.2 E Key 2230 x 1	9 ~ 36V	0°C ~ 60°C	DIO x 8, nano SIM, Touch Controller, TPM