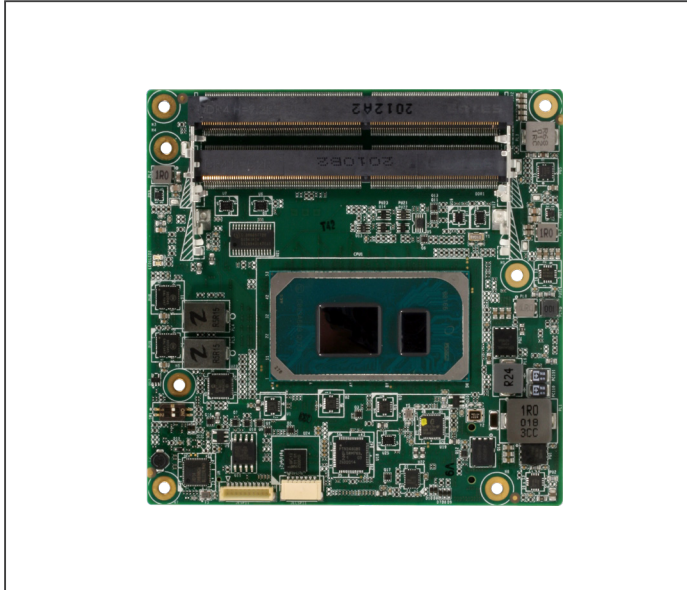


COM-TGUC6

COM Express Compact Type 6 with 11th Generation Intel® Core™ Processor Family (formerly Tiger Lake UP3)



Features

- 11th Generation Intel® Core™ Processor Family (formerly Tiger Lake UP3)
- 2 x SODIMM DDR4 3200MHz Memory, up to 32GB (in-band ECC)
- Intel I225LM Gigabit Ethernet x 1
- VGA, 18/24-bit 2ch LVDS/eDP, DDI x 3
- High Definition Audio Interface
- SATA3.0 x 2
- USB 2.0 x 8, USB 3.2/2.0 x 4 (up to USB 3.2 Gen 2 support)
- PCI-Express [x1] x 5 (Gen3), PEG [x4] x1 (Gen4)
- 12V DC input
- COM Express Type 6, Compact size, 95mm x 95mm



Specifications

System	
Form Factor	COM Express Compact size, Type 6
CPU	11th Generation Intel® Core™ Processor Family (formerly Tiger Lake UP3)
CPU Frequency	Up to 1.8 GHz, i7-1185GRE
Chipset	11th Gen Intel® Core™ Series Processor
Memory Type	DDR4 3200 MHz SODIMM x2 (Dual Channel) in-band ECC supported by SoC
Max. Memory Capacity	Up to 32 GB
BIOS	AMI UEFI
Wake on LAN	Yes
Watchdog Timer	255 Levels
Power Requirement	Standard: +12V
Power Supply Type	—
Power Consumption (Typical)	12Vin, TDP up to 15~36W with i7 @ max loading, stable status
Dimension (L x W)	3.75" x 3.75" (95mm x 95mm)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C) Option : -40°C ~ +85°C (-40°C ~ +85°C)
Storage Temperature	-4°F ~ 158°F (-20°C ~ 70°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	TBD
Certification	CE/FCC
Display	
VGA/LCD Controller	Intel® Iris® Xe Graphics Intel® UHD Graphics for 11th Gen Intel® Processors
Video Output	LVDS/eDP x 1 (Default : LVDS) , DDI x 3, VGA x 1
LVDS Interface	18/24-bit 2 Channel LVDS
I/O	
Ethernet	Intel® I225LM Gigabit Ethernet x 1
Audio	High Definition Audio Interface x 1
USB Port	USB3.2 Gen 2 x 4 USB2.0 x 8
Serial Port	2-wire UART x 2 (TX/RX)
HDD Interface	SATA 3.0 x 2
Onboard Storage	—
Expansion	PCIe 5 lanes, [x1] x5 PEG[x4], I2C, LPC, SMBus
GPIO	8-bit
TPM	TPM 2.0 Optional

Packing List

- COM-TGUC6

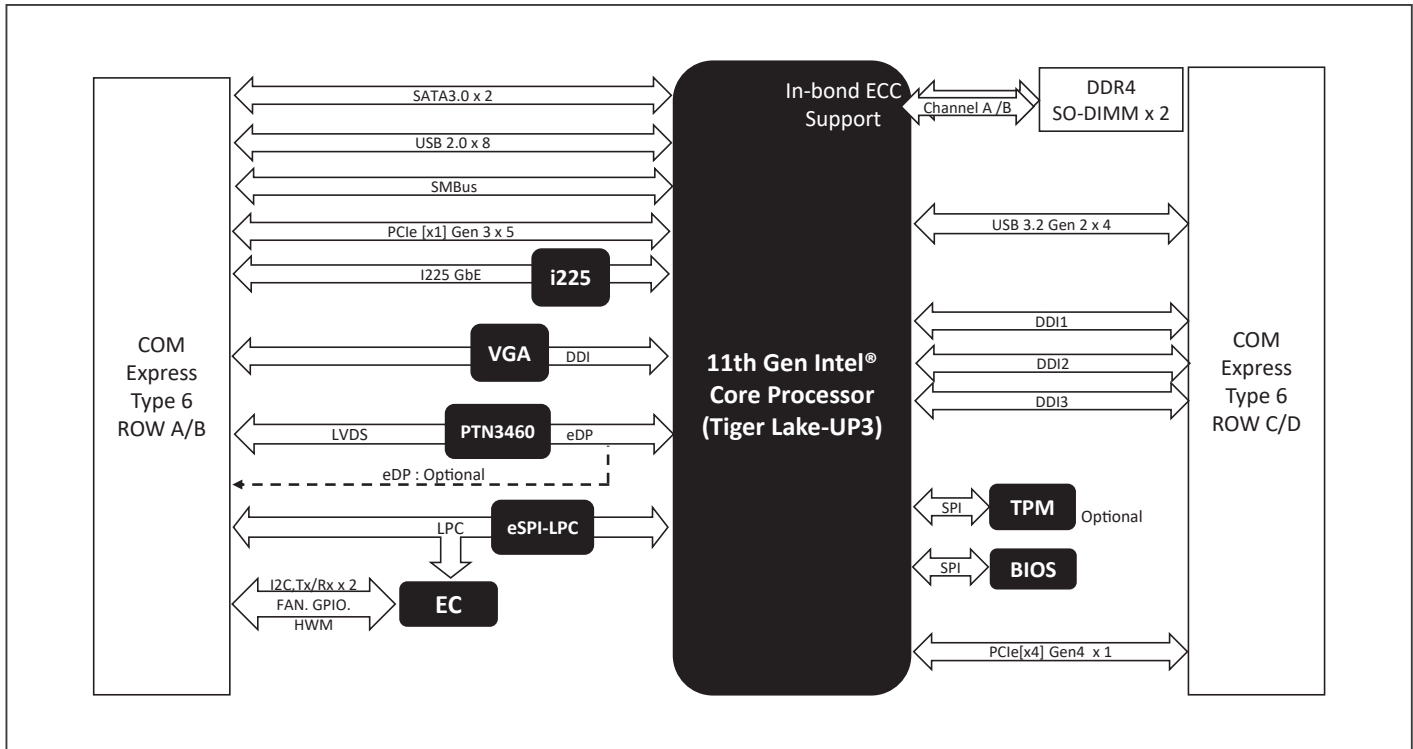
Optional Accessories

- COM-TGUC6-FAN01
Cooler.12V.Smart FAN.95x95x24MM.COM-TGUC6
- COM-TGUC6-HSP01
Heat Spreader.AL.95x95x11mm.Black.COM-TGUC6
- ECB-920A-A11-0001
COMe Type 6/10.Carrier Board.ATX.2.5GbE.8USB, 2COM.4SATA.PCIe.AT/ATX.Rev. A1.1
- COM-FAN02
CPU Cooler.95*95*26.5mm.Silver.use w/HSP

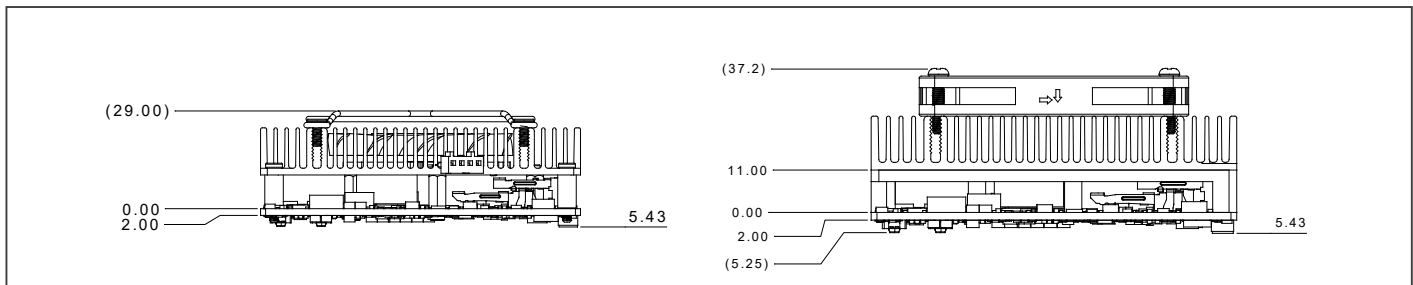
CPU Support Chart

CPU	Core / Thread	Base Frequency / Turbo	TDP	Graphic	In-band ECC	Operating Temp.
i7-1185G7E	4/8	1.8 GHz / 4.4 GHz	15W (Up to 28W)	Intel® Iris® Xe Graphics	No	Commercial Temp.
i5-1145G7E	4/8	1.5 GHz / 4.1 GHz		Intel® Iris® Xe Graphics	No	Commercial Temp.
i3-1115G4E	2/4	2.2 GHz / 3.9 GHz		Intel® UHD Graphics	No	Commercial Temp.
i7-1185GRE	4/8	1.8 GHz / 4.4 GHz		Intel® Iris® Xe Graphics	Yes	Embedded/Industrial Extended Temp.
i5-1145GRE	4/8	1.5 GHz / 4.1 GHz		Intel® Iris® Xe Graphics	Yes	Embedded/Industrial Extended Temp.
i3-1115GRE	2/4	2.2 GHz / 3.9 GHz		Intel® UHD Graphics	Yes	Embedded/Industrial Extended Temp.
Celeron 6305E	2/2	1.8 GHz / ---	15W	Intel® UHD Graphics	No	Commercial Temp.

Block Diagram Unit: mm



Dimension Unit: mm



Ordering Information

PART NUMBER	COM EXPRESS TYPE	CPU	MEMORY	DISPLAY	LVDS	STORAGE	LAN	USB	UART	EXPANSION	POWER	TEMPERATURE	OTHERS
COM-TGUC6-A10-0001	Type 6 (COM.0 Rev. 3.0)	i7-1185G7E	DDR4 SO-DIMM x 2	LVDS, DDI x 3, VGA x 1	18/24bits 2CH LVDS	SATA3 x 2	2.5 GbE x 1	USB 3.2 Gen 1 x 2 USB 2.0 x 8	2 (Tx/Rx)	PCIe [x1] x 5 PEG [x4] x 1	12V	0°C - 60°C	LPC, SMBus, I2C
COM-TGUC6-A10-0002	Type 6 (COM.0 Rev. 3.0)	i5-1145G7E	DDR4 SO-DIMM x 2	LVDS, DDI x 3, VGA x 1	18/24bits 2CH LVDS	SATA3 x 2	2.5 GbE x 1	USB 3.2 Gen 1 x 2 USB 2.0 x 8	2 (Tx/Rx)	PCIe [x1] x 5 PEG [x4] x 1	12V	0°C - 60°C	LPC, SMBus, I2C
COM-TGUC6-A10-0005	Type 6 (COM.0 Rev. 3.0)	i7-1185GRE	DDR4 SO-DIMM x 2	LVDS, DDI x 3, VGA x 1	18/24bits 2CH LVDS	SATA3 x 2	2.5 GbE x 1	USB 3.2 Gen 1 x 2 USB 2.0 x 8	2 (Tx/Rx)	PCIe [x1] x 5 PEG [x4] x 1	12V	0°C - 60°C	LPC, SMBus, I2C
COM-TGUC6-A10-0006	Type 6 (COM.0 Rev. 3.0)	i5-1145GRE	DDR4 SO-DIMM x 2	LVDS, DDI x 3, VGA x 1	18/24bits 2CH LVDS	SATA3 x 2	2.5 GbE x 1	USB 3.2 Gen 1 x 2 USB 2.0 x 8	2 (Tx/Rx)	PCIe [x1] x 5 PEG [x4] x 1	12V	0°C - 60°C	LPC, SMBus, I2C