



AAEON COM-TGUC6-A10-0006 11th Gen Intel Core i5-1145GRE COM Express Type 6 Compact Size Module

Key Features:

- DDR4 3200MHz SODIMM x 2, up to 64GB (ECC by SKU)
- VGA x 1, LVDS x 1, DDI x 3
- USB 2.0 x 8, USB 3.2 Gen2 x 4
- PCIe [x1] x 5, PCIe [x4] x1
- Intel I225-LM 2.5GbE x 1
- COM Express Type 6, 3.74" x 3.74" (95mm x 95mm)

Description

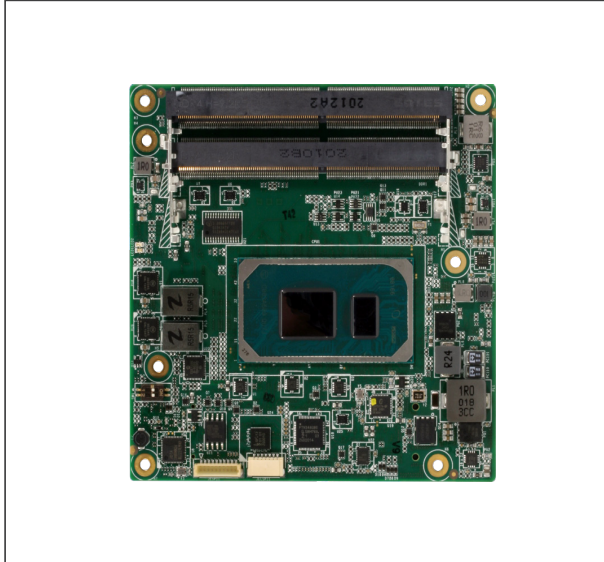
Introducing the COM-TGUC6 from AAEON. Featuring the 11th Generation Intel Core U processors (formerly Tiger Lake) on the compact COM Type 6 form factor, the COM-TGUC6 delivers powerful processing capabilities along with support for the latest I/O specifications, enabling faster and more flexible connections, including 2.5 Gbps Ethernet.

The COM-TGUC6 also features display support for VGA, up to three DDI ports and LVDS/eDP, with the power to support up to four independent displays. Additionally, the COM-TGUC6 supports DDR4 modules with speeds up to 3200 MHz, and with industrial Intel Core processors, can operate in temperatures from -40°C to 85°C.

COM-TGUC6

COM Express Type 6 Compact Size with 11th Gen Intel® Core™/Celeron® Processor 6000 Series Processors

COM Express CPU Modules



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Specifications

System	
Form Factor	COM Express Compact Size, Type 6
CPU	11th Generation Intel® Core™ Processors: Intel® Core™ i7-1185G7E (4C/8T, 1.8 GHz, 15W) Intel® Core™ i7-1185GRE (4C/8T, 1.80 GHz, 15W) Intel® Core™ i5-1145G7E (4C/8T, 1.5 GHz, 15W) Intel® Core™ i5-1145GRE (4C/8T, 1.50 GHz, 15W) Intel® Core™ i3-1115G4E (2C/4T, 2.20 GHz, 15W) Intel® Core™ i3-1115GRE (2C/4T, 2.20 GHz, 15W) Intel® Celeron® Processor 6000 Series: Intel® Celeron® 6305E Processor (2C/2T 1.80 GHz, 15W)
Chipset	Integrated with Intel® SoC
Memory	DDR4 3200MHz SODIMM x 2, up to 64GB (In-Band ECC by SKU)
Onboard Storage	—
BIOS	AMI UEFI
Wake on LAN	Yes
Watchdog Timer	255 Levels
Dimension	3.74" x 3.74" (95mm x 95mm)
Security	TPM 2.0 (Optional)
Power	
Power Requirement	+12V and +5VSB for ATX, +12V for AT
Power Type	AT/ATX
Power Consumption (Typical)	Intel® Core™ i7-1185GRE, 3.5A @+12V
Display	
Graphics Controller	Intel® Iris® Xe Graphics Intel® UHD Graphics
Video Output	4 Simultaneous Displays: DDI x 3, up to 3840 x 2160 18/24-bit Single/Dual-Channel LVDS/eDP x 1, up to 3840 x 2160/1920 x 1080 VGA x 1, up to 1920 x 1080
I/O	
Ethernet	Intel® I225-LM 2.5GbE x 1
Audio	High Definition Audio Interface
USB Port	USB 2.0 x 8, USB 3.2 Gen 2 x 4
Serial Port	2-Wire UART x 2 (Tx/Rx)
HDD Interface	SATA III x 2

Expansion	PEG 4.0 [x4] x 1 PCIe 3.0 [x1] x 5 LPC x 1
GPIO	8-bit
SMBus/I2C	I2C x 1, SMBus x 1
Environment	
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-40°F ~ 185°F (-40°C ~ 85°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
EMC	CE/FCC Class A
OS Support	Windows® 10 (64-bit) Linux Ubuntu 20.04.2/Kernel 5.8
Weight	0.44 lb. (0.20Kg)

Packing List

- COM-TGUC6

Optional Accessories

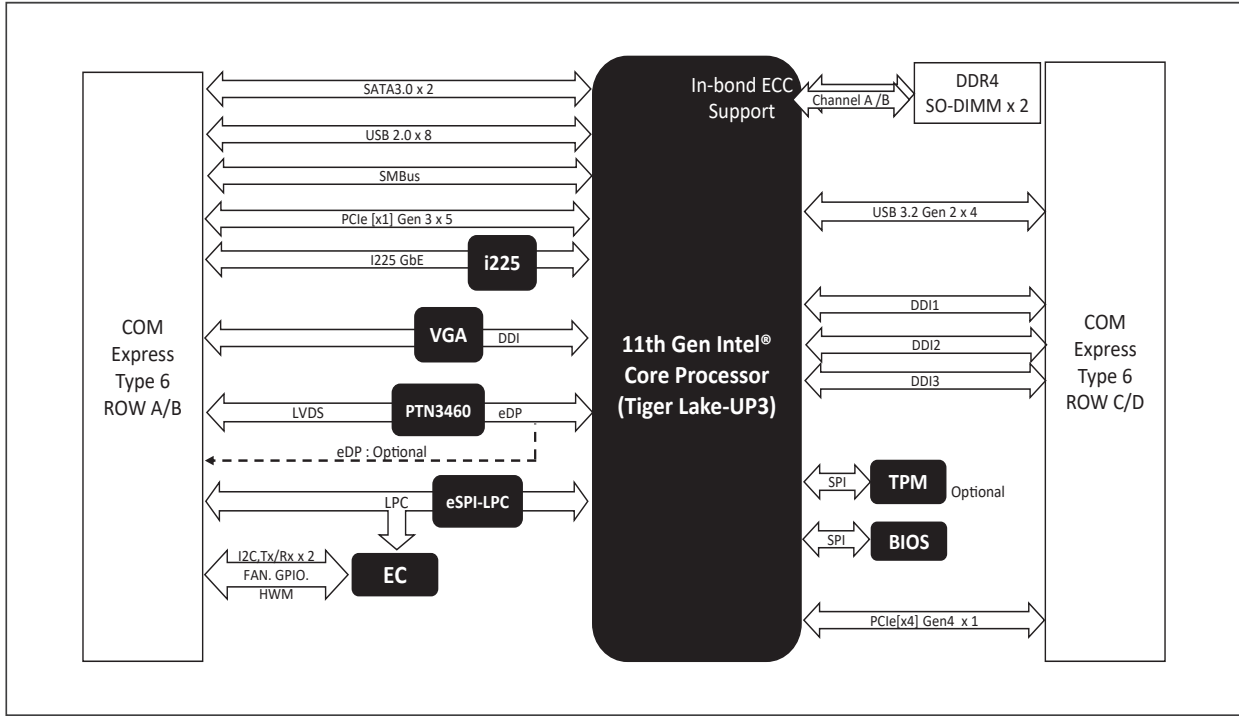
Part Number	Description
ECB-920A-A11-0001	COMe Type 6/10 Carrier Board.ATX.2.5GbE.8USB.2COM.4SATA.PCIE.AT/ATX. Rev.A1.1
COM-TGUC6-FAN01	Cooler.95mm x 95mm x 24mm.4pin
COM-TGUC6-HSP01	Heat Spreader.95mm x 95mm x 11mm.Black
COM-FAN02	coole.95mm x 95mm x 26.5mm.3pin.w/HSP

COM-TGUC6

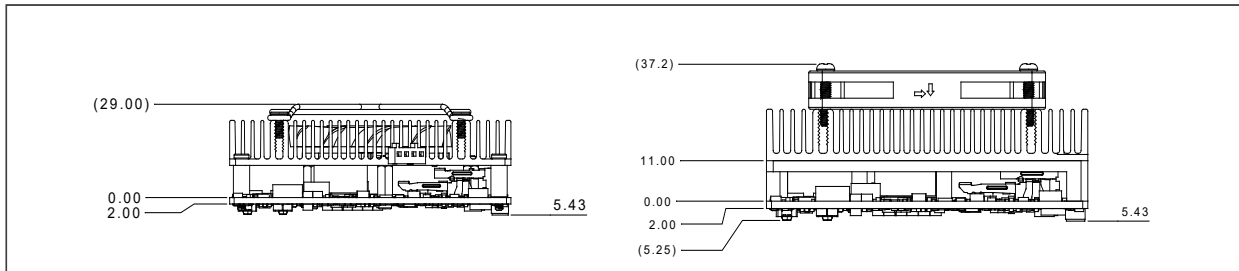
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COM Express CPU Modules

Block Diagram Unit: mm



Dimension Unit: mm

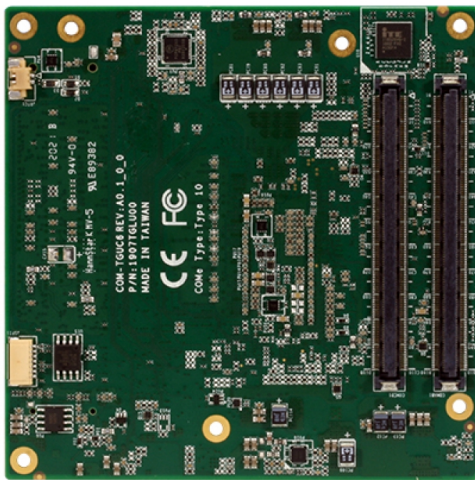
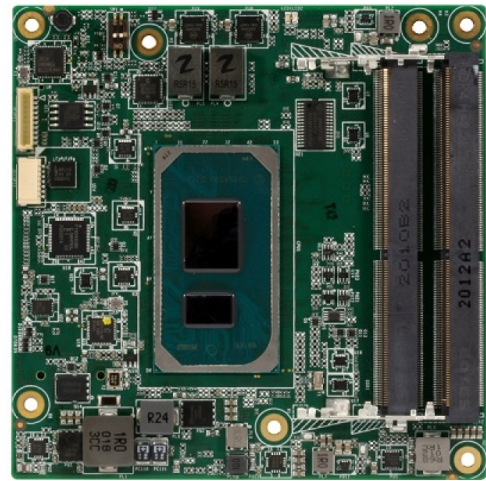


Ordering Information

Part Number	COM Express Type	CPU	Memory	ECC support	Display	Storage	LAN	USB	UART	Expansion	Power	Temperature	Others
COM-TGUC6-A10-0001	Type 6	Intel® Core™ i7-1185G7E	DDR4 SODIMM x 2	—	VGA x 1, LVDS x 1, DDI x 3	SATA III x 2	Intel® I225-LM x 1	USB 3.2 Gen 2 x 4 USB 2.0 x 8	2-Wire UART x 2 (Tx/Rx)	PCIe [x1] x 5 PCIe [x4] x 1	12V	0°C ~ 60°C	LPC, GPIO 8-bit, I2C, SMBus, SPI
COM-TGUC6-A10-0002	Type 6	Intel® Core™ i5-1145G7E	DDR4 SODIMM x 2	—	VGA x 1, LVDS x 1, DDI x 3	SATA III x 2	Intel® I225-LM x 1	USB 3.2 Gen 2 x 4 USB 2.0 x 8	2-Wire UART x 2 (Tx/Rx)	PCIe [x1] x 5 PCIe [x4] x 1	12V	0°C ~ 60°C	LPC, GPIO 8-bit, I2C, SMBus, SPI
COM-TGUC6-A10-0003	Type 6	Intel® Core™ i3-1115G4E	DDR4 SODIMM x 2	—	VGA x 1, LVDS x 1, DDI x 3	SATA III x 2	Intel® I225-LM x 1	USB 3.2 Gen 2 x 4 USB 2.0 x 8	2-Wire UART x 2 (Tx/Rx)	PCIe [x1] x 5 PCIe [x4] x 1	12V	0°C ~ 60°C	LPC, GPIO 8-bit, I2C, SMBus, SPI
COM-TGUC6-A10-0004	Type 6	Intel® Celeron® 6305E Processor	DDR4 SODIMM x 2	—	VGA x 1, LVDS x 1, DDI x 3	SATA III x 2	Intel® I225-LM x 1	USB 3.2 Gen 2 x 4 USB 2.0 x 8	2-Wire UART x 2 (Tx/Rx)	PCIe [x1] x 5 PCIe [x4] x 1	12V	0°C ~ 60°C	LPC, GPIO 8-bit, I2C, SMBus, SPI
COM-TGUC6-A10-0005	Type 6	Intel® Core™ i7-1185G7E	DDR4 SODIMM x 2	Yes	VGA x 1, LVDS x 1, DDI x 3	SATA III x 2	Intel® I225-LM x 1	USB 3.2 Gen 2 x 4 USB 2.0 x 8	2-Wire UART x 2 (Tx/Rx)	PCIe [x1] x 5 PCIe [x4] x 1	12V	0°C ~ 60°C	LPC, GPIO 8-bit, I2C, SMBus, SPI
COM-TGUC6-A10-0006	Type 6	Intel® Core™ i5-1145G7E	DDR4 SODIMM x 2	Yes	VGA x 1, LVDS x 1, DDI x 3	SATA III x 2	Intel® I225-LM x 1	USB 3.2 Gen 2 x 4 USB 2.0 x 8	2-Wire UART x 2 (Tx/Rx)	PCIe [x1] x 5 PCIe [x4] x 1	12V	0°C ~ 60°C	LPC, GPIO 8-bit, I2C, SMBus, SPI
COM-TGUC6-A10-0007	Type 6	Intel® Core™ i3-1115G4E	DDR4 SODIMM x 2	Yes	VGA x 1, LVDS x 1, DDI x 3	SATA III x 2	Intel® I225-LM x 1	USB 3.2 Gen 2 x 4 USB 2.0 x 8	2-Wire UART x 2 (Tx/Rx)	PCIe [x1] x 5 PCIe [x4] x 1	12V	0°C ~ 60°C	LPC, GPIO 8-bit, I2C, SMBus, SPI

Note: All specifications are subject to change without notice.

Images



Assured Systems

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