

Specifications

System	
Form Factor	COM Express Basic Size, Type 6
CPU	11th Generation Intel® Xeon/Core™ Processor
CPU Frequency	Up to 2.6 GHz, 8 Core, W-11865MRE/ I7-11850HE
Chipset	Intel 500 series PCH QM580E/RM590E
Memory Type	SODIMM DDR4 3200 Socket x 2
Max. Memory Capacity	Up to 64 GB (ECC Support by SKU)
BIOS	AMI BIOS (UEFI)
Wake on LAN	Yes
Watchdog Timer	255 Levels
Power Requirement	+12 V and +5 VSB for ATX, +12V for AT
Power Supply Type	AT/ATX
Power Consumption (Typical)	5.26A@12V,W-11865MRE
Dimension (L x W)	4.92" x 3.75" (125mm x 95mm)
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
Certification	CE / FCC Class A
Display	
Graphic Controller	Intel® UHD Graphics
Video Output	DDI x 3 LVDS or eDP x 1 (Default: LVDS, 18/24b 2CH LVDS, or 4 lane eDP) VGA x 1
I/O	
Ethernet	Intel® i225/i226LM/IT GbE x 1
Audio	High Definition Audio Interface
USB Port	USB 2.0 x 8, USB 3.2 Gen2 x 4
Serial Port	2-Wire UART (Tx/Rx) x2
HDD Interface	SATA3 x4
Expansion Slot	PCIe 4.0 [x16] x 1, PCIe 3.0 [x1] x 8 LPC x 1 SMBus x 1 I2C x 1
GPIO	8-bit
Onboard Storage	N/A
TPM	TPM 2.0

Features

- 11th Generation Intel® Core™ Tiger Lake-H Xeon/Core Series Processor
- Intel 500 Chipset series (RM590E / QM580E)
- DDR4 3200 MHz SODIMM x 2 (ECC Support), up to 64GB
- Intel I225LM 2.5GbE x 1
- VGA, 18/24-bit 2ch LVDS/eDP, DDIx3
- High Definition Audio Interface
- SATA3.0 x 4
- USB2.0 x 8, USB3.2 Gen2 x 4
- PCIe[x16] x 1 (Gen4) , PCIe [x1] x 8 (Gen3) , I2C, SMBus, LPC, TPM2.0 (Optional)
- 12V DC input
- PICMG COM.0 R3.0 Type 6, Basic size, 125mm x 95mm



Packing List

- COM-TGHB6-A10 x 1

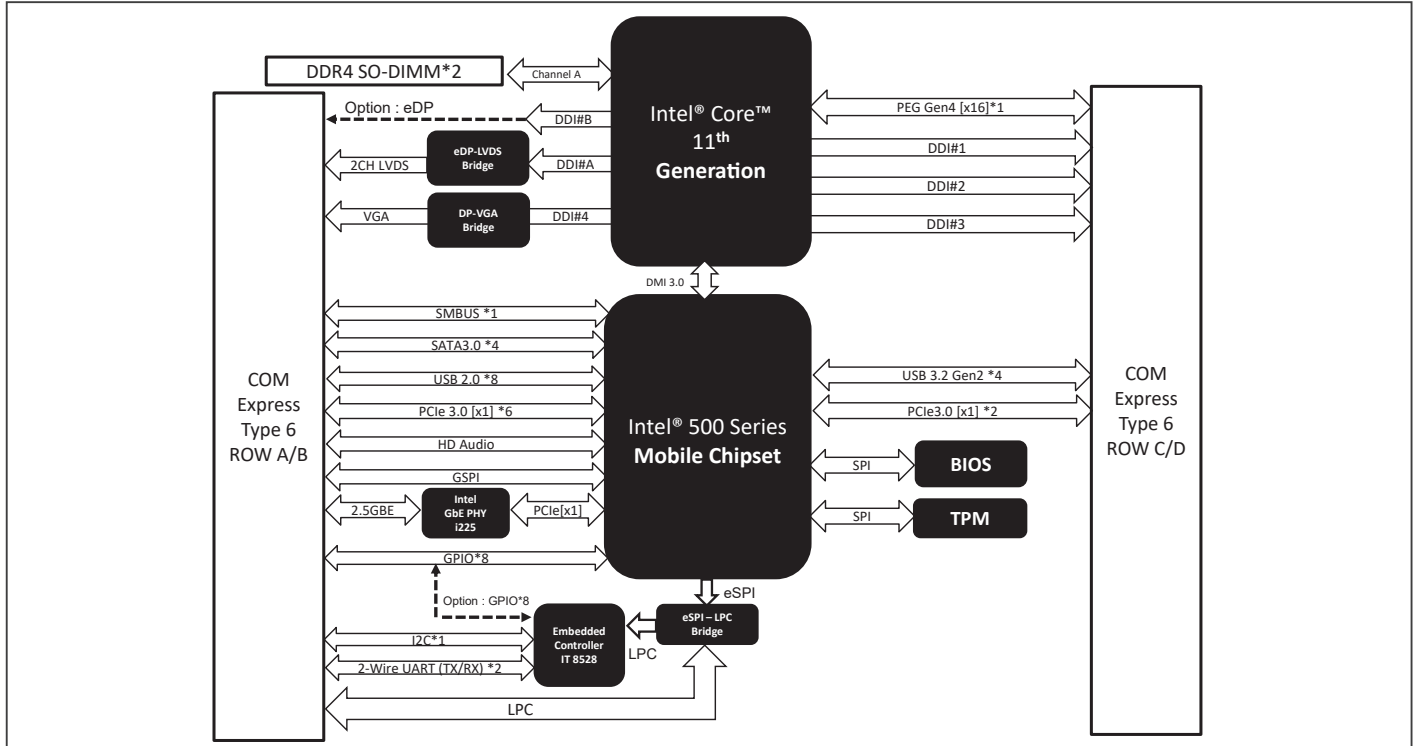
Optional Accessories

- **COM-TGHB6-FAN01**
Cooler:12V.Smart FAN.125*95*30mm.COM-TGHB6
- **COM-TGHB6-HSP01**
Heat Spreader.125*95*11mm.Black.COM-TGHB6
- **COM-FAN01**
CPU Cooler.125*95*26.4mm.Silver.use w/HSP
- **ECB-920A-A11-0001**
COMe Type 6/10.Carrier Board.ATX.2.5GbE.8USB, 2COM.4SATA.PCIe.AT/ATX.Rev. A1.1

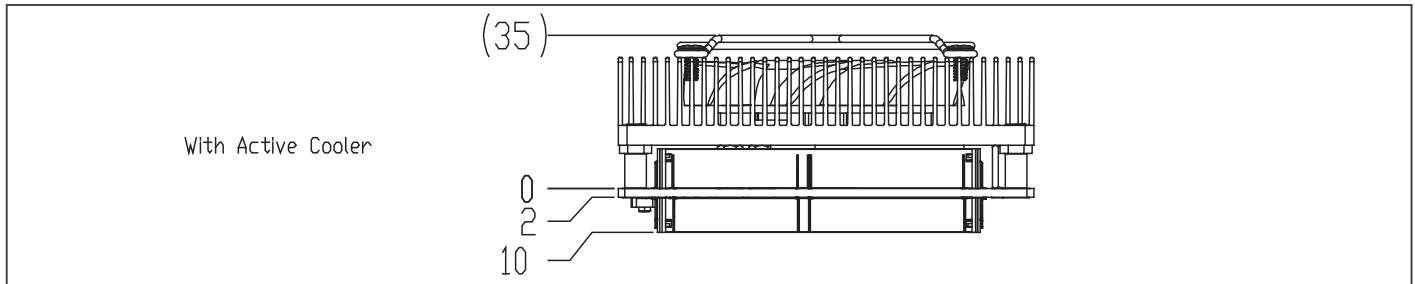
CPU Support Chart

CPU	Core / Thread	Base Frequency	Max Turbo Frequency	Graphic
I7-11850HE	8C/16T	2.6	4.7	Intel® UHD Graphics
I5-11500HE	6C/12T	2.6	4.5	Intel® UHD Graphics
I3-11100HE	4C/8T	2.4	4.4	Intel® UHD Graphics
Celeron 6600HE	2C/2T	2.6	—	Intel® UHD Graphics
W-11865MRE	8C/16T	2.6	4.7	Intel® UHD Graphics
W-11865MLE	8C/16T	1.5	4.5	Intel® UHD Graphics
W-11555MRE	6C/12T	2.6	4.5	Intel® UHD Graphics
W-11155MRE	4C/8T	2.4	4.4	Intel® UHD Graphics
W-11555MLE	6C/12T	1.9	4.4	Intel® UHD Graphics
W-11155MLE	4C/8T	1.8	3.1	Intel® UHD Graphics

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	Other
COM-TGHB6-A10-0001	COM Express Basic Size, Type 6	I7-11850HE	DDR4 SODIMM x 2	DDI x3, LVDS or eDP x1, VGA x1	18/24b 2CH (LVDS, or 4 lanes eDP)	SATA 3 x 4	Intel® I225LM Gigabit Ethernet x 1	USB 2.0 x 8, USB 3.2 Gen2 x 4	2-Wire UART(Tx/Rx) x2	PCIe[x16] x1, PCIe[x1] x 8	+12V	0°C ~ 60°C	LPC/e-SPI, SMBus, I2C
COM-TGHB6-A10-0002	COM Express Basic Size, Type 6	i5-11500HE	DDR4 SODIMM x 2	DDI x3, LVDS or eDP x1, VGA x1	18/24b 2CH (LVDS, or 4 lanes eDP)	SATA 3 x 4	Intel® I225LM Gigabit Ethernet x 1	USB 2.0 x 8, USB 3.2 Gen2 x 4	2-Wire UART(Tx/Rx) x2	PCIe[x16] x1, PCIe[x1] x 8	+12V	0°C ~ 60°C	LPC/e-SPI, SMBus, I2C
COM-TGHB6-A10-0003	COM Express Basic Size, Type 6	i3-11100HE	DDR4 SODIMM x 2	DDI x3, LVDS or eDP x1, VGA x1	18/24b 2CH (LVDS, or 4 lanes eDP)	SATA 3 x 4	Intel® I225LM Gigabit Ethernet x 1	USB 2.0 x 8, USB 3.2 Gen2 x 4	2-Wire UART(Tx/Rx) x2	PCIe[x16] x1, PCIe[x1] x 8	+12V	0°C ~ 60°C	LPC/e-SPI, SMBus, I2C
COM-TGHB6-A10-0004	COM Express Basic Size, Type 6	W-11865MRE	DDR4 SODIMM x 2	DDI x3, LVDS or eDP x1, VGA x1	18/24b 2CH (LVDS, or 4 lanes eDP)	SATA 3 x 4	Intel® I225LM Gigabit Ethernet x 1	USB 2.0 x 8, USB 3.2 Gen2 x 4	2-Wire UART(Tx/Rx) x2	PCIe[x16] x1, PCIe[x1] x 8	+12V	0°C ~ 60°C	LPC/e-SPI, SMBus, I2C
COM-TGHB6-A10-0005	COM Express Basic Size, Type 6	W-11865MLE	DDR4 SODIMM x 2	DDI x3, LVDS or eDP x1, VGA x1	18/24b 2CH (LVDS, or 4 lanes eDP)	SATA 3 x 4	Intel® I225LM Gigabit Ethernet x 1	USB 2.0 x 8, USB 3.2 Gen2 x 4	2-Wire UART(Tx/Rx) x2	PCIe[x16] x1, PCIe[x1] x 8	+12V	0°C ~ 60°C	LPC/e-SPI, SMBus, I2C