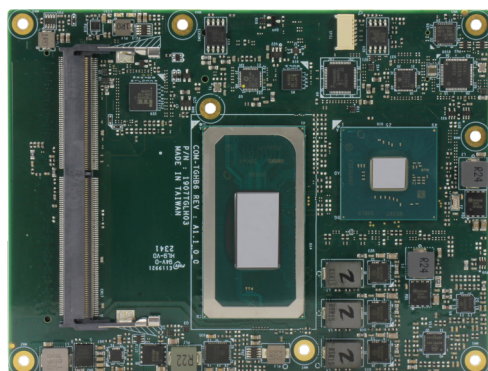


# COM-TGHB6

COM Express Type 6 with 11th Gen Intel® Core™/Xeon® W Processors



## Features

- DDR4 3200MHz SODIMM x 2, up to 64GB
- VGA x 1, LVDS x 1, DDI x 3
- USB 2.0 x 8, USB 3.2 Gen 2 x 4
- PCIe [x1] x 8, PCIe [x16] x 1
- Intel® I226-LM 2.5GbE x 1
- COM Express Type 6, 4.92" x 3.75" (125mm x 95mm)



## Specifications

| System                      |                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Form Factor                 | COM Express Basic Size, Type 6                                                                                                                                                                                                                                                                                                      |
| CPU                         | 11th Generation Intel® Core™ Processors:<br>Intel® Core™ i7-11850HE (8C/16T, 2.1 GHz, 35W)<br>Intel® Core™ i5-11500HE (6C/12T, 2.1 GHz, 35W)<br>Intel® Core™ i3-11100HE (4C/8T, 1.9 GHz, 35W)<br><br>Intel® Xeon® W Processors:<br>Intel® Xeon® W-11865MRE (8C/16T, 2.1 GHz, 35W)<br>Intel® Xeon® W-11865MLE (8C/16T, 1.5 GHz, 25W) |
| Chipset                     | Intel® QM580E<br>Intel® RM590E                                                                                                                                                                                                                                                                                                      |
| Memory                      | DDR4 3200MHz Dual Channel, SODIMM x 2, up to 64GB                                                                                                                                                                                                                                                                                   |
| Onboard Storage             | —                                                                                                                                                                                                                                                                                                                                   |
| BIOS                        | AMI UEFI                                                                                                                                                                                                                                                                                                                            |
| Wake on LAN                 | Yes                                                                                                                                                                                                                                                                                                                                 |
| Watchdog Timer              | 255 Levels                                                                                                                                                                                                                                                                                                                          |
| Dimension                   | 4.92" x 3.75" (125mm x 95mm)                                                                                                                                                                                                                                                                                                        |
| Security                    | TPM 2.0                                                                                                                                                                                                                                                                                                                             |
| Power                       |                                                                                                                                                                                                                                                                                                                                     |
| Power Requirement           | +12V and +5VSB for ATX, +12V for AT                                                                                                                                                                                                                                                                                                 |
| Power Type                  | AT/ATX                                                                                                                                                                                                                                                                                                                              |
| Power Consumption (Typical) | Intel® Xeon® W-11865MRE, 5.26A @+12V                                                                                                                                                                                                                                                                                                |
| Display                     |                                                                                                                                                                                                                                                                                                                                     |
| Graphics Controller         | Intel® UHD Graphics                                                                                                                                                                                                                                                                                                                 |
| Video Output                | 5 Simultaneous Displays:<br>DDI x 3, up to 3840 x 2160<br>LVDS/eDP x 1, up to 1920 x 1080<br>VGA x 1, up to 1920 x 1080                                                                                                                                                                                                             |
| I/O                         |                                                                                                                                                                                                                                                                                                                                     |
| Ethernet                    | Intel® I226-LM 2.5GbE x 2                                                                                                                                                                                                                                                                                                           |
| 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 4                                             |
| Expansion             | PEG 4.0 [x16] x 1<br>PCIe 3.0 [x1] x 8<br>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)<br>Linux Ubuntu 20.04.4/Kernel 5.13 |
| Weight                | 0.33 lb. (0.15Kg)                                        |

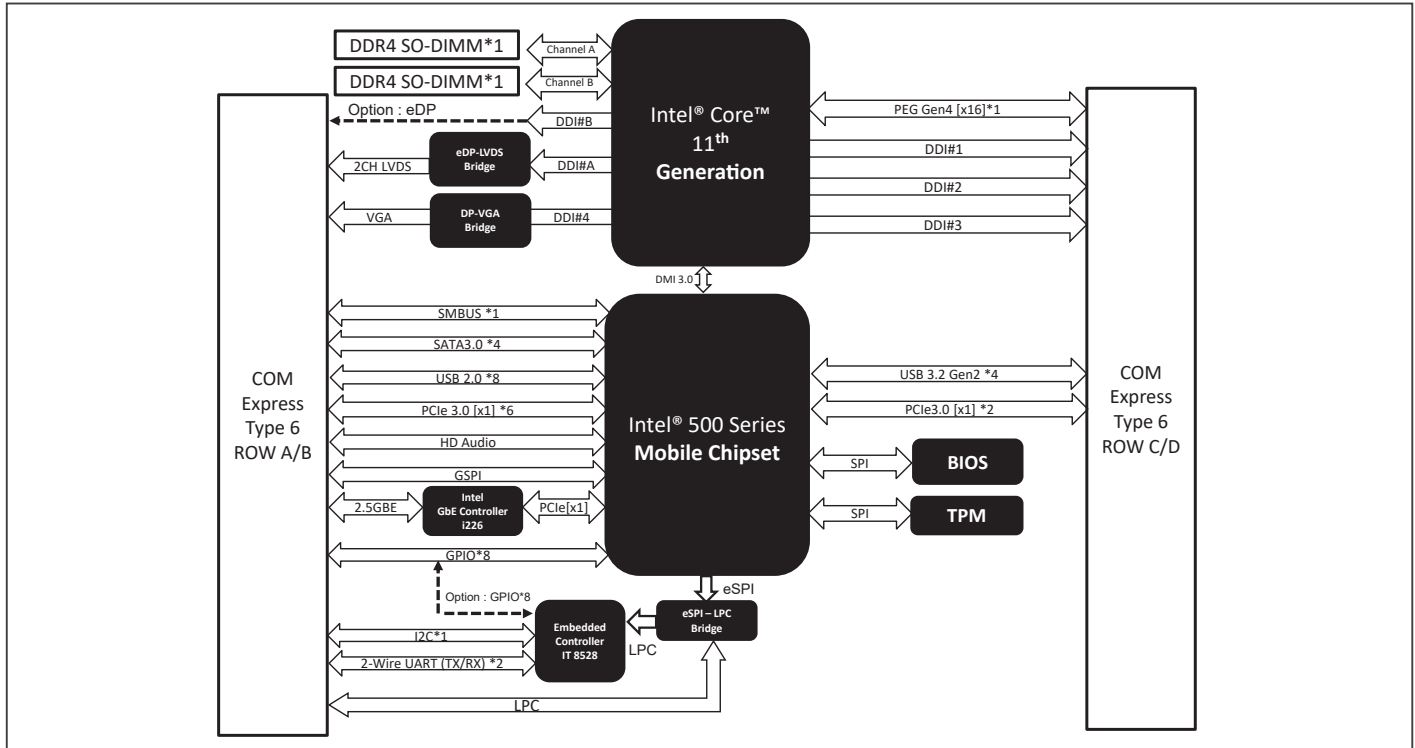
## Packing List

- COM-TGHB6

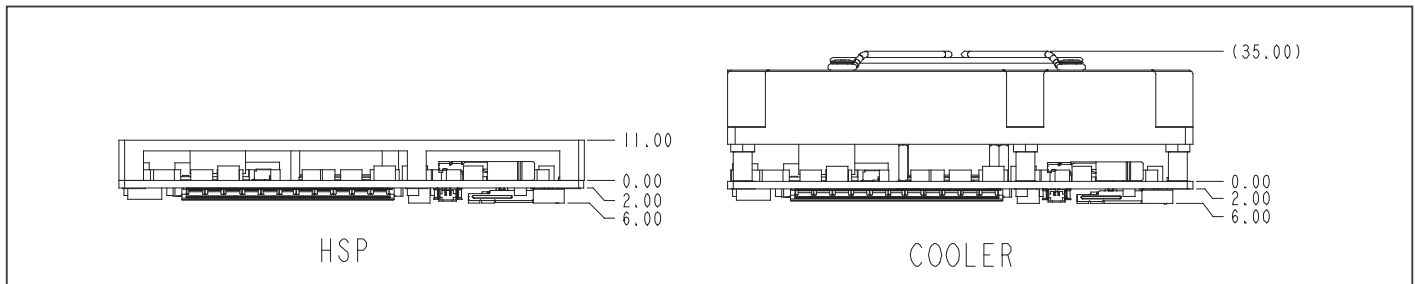
## Optional Accessories

| 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-TGHB6-HSP01   | Heat Spreader. 125mm x 95mm x 11mm. Black                                            |
| COM-TGHB6-FAN01   | Cooler. 125mm x 95mm x 35mm. 4pin                                                    |
| COM-FAN01         | Cooler. 125mm x 95mm x 26.4mm. 3pin.w/HSP                                            |

## 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-TGHB6-A11-0001 | Type 6           | Intel® Core™ i7-11850HE | DDR4 SODIMM x 2 | —           | VGA x 1, LVDS x 1, DDI x 3 | SATA III x 4 | Intel® I226-LM x 1 | USB 3.2 Gen 2 x 4<br>USB 2.0 x 8 | 2-Wire UART x 2 (Tx/Rx) | PCIe [x1] x 8<br>PCIe [x16] x 1 | 12V   | 0°C ~ 60°C  | LPC, GPIO 8-bit, I2C, SMBus, SPI |
| COM-TGHB6-A11-0002 | Type 6           | Intel® Core™ i5-11500HE | DDR4 SODIMM x 2 | —           | VGA x 1, LVDS x 1, DDI x 3 | SATA III x 4 | Intel® I226-LM x 1 | USB 3.2 Gen 2 x 4<br>USB 2.0 x 8 | 2-Wire UART x 2 (Tx/Rx) | PCIe [x1] x 8<br>PCIe [x16] x 1 | 12V   | 0°C ~ 60°C  | LPC, GPIO 8-bit, I2C, SMBus, SPI |
| COM-TGHB6-A11-0003 | Type 6           | Intel® Core™ i3-11100HE | DDR4 SODIMM x 2 | —           | VGA x 1, LVDS x 1, DDI x 3 | SATA III x 4 | Intel® I226-LM x 1 | USB 3.2 Gen 2 x 4<br>USB 2.0 x 8 | 2-Wire UART x 2 (Tx/Rx) | PCIe [x1] x 8<br>PCIe [x16] x 1 | 12V   | 0°C ~ 60°C  | LPC, GPIO 8-bit, I2C, SMBus, SPI |