

## KEY FEATURES

- Intel® 13th Gen (Raptor Lake-P) Core™ Processors
- 2 x 260-pin SO-DIMM DDR4 3200 MHz, up to 64GB (32GB per DIMM)
- 1 x PCIe x8 (Gen4) (Support by 45W CPU SKUs), 1 x PCIe x4 (Gen4), 4 x PCIe x1 (Gen3), 4 x USB3.2 Gen2, 8 x USB2.0, 2 x UART, 2 x SATA3
- 1 x Intel 2.5 Gigabit LAN
- Supports Quad display, 3 x DDI, 1 x LVDS or eDP (optional)
- TPM 2.0 onboard IC (optional)
- Supports Intel® vPro, VMD RAID 0/1/5/10
- ATX: 12V±5%/5Vsb±5%
- AT: 12V±5%

## SPECIFICATIONS

### Form Factor

|            |                                                                              |
|------------|------------------------------------------------------------------------------|
| Dimensions | COM Express Type6<br>(3.74-in x 3.74-in x 0.52-in, 9.5 cm x 9.5 cm x 1.3 cm) |
|------------|------------------------------------------------------------------------------|

### Processor System

|         |                                                                                                                                                                      |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CPU     | Intel® 13th Gen (Raptor Lake-P) Core™ Processors<br>-COM-655P-WT (i7-1365URE, 2P+8E)<br>-COM-655M-WT (i5-1345URE, 2P+8E)<br>*45W CPU SKUs are available upon request |
| Chipset | MCP                                                                                                                                                                  |
| BIOS    | AMI SPI 256 Mbit                                                                                                                                                     |

### Memory

|            |                            |
|------------|----------------------------|
| Technology | Dual Channel DDR4 3200 MHz |
| Capacity   | 64 GB (32 GB per DIMM)     |
| Socket     | 2 x 260-pin SO-DIMM        |

### Graphics

|              |                                                               |
|--------------|---------------------------------------------------------------|
| Controller   | Intel® Iris® Xe Graphics                                      |
| HDMI         | HDMI 2.1<br>Max resolution up to 4096x2160@60Hz               |
| DisplayPort  | DisplayPort 1.4a, DP++<br>Max resolution up to 4096x2304@60Hz |
| LVDS         | Dual channel 24 bit up to 1920 x 1200@60Hz                    |
| eDP          | eDP1.4b<br>Max resolution up to 4096 x 2304@60Hz (optional)   |
| MultiDisplay | Quad Display                                                  |

### Expansion Slot

|      |                                                                                          |
|------|------------------------------------------------------------------------------------------|
| PCIe | 1 x PCIe x8 (Gen4) (Support by 45W CPU SKUs)<br>1 x PCIe x4 (Gen4)<br>4 x PCIe x1 (Gen3) |
|------|------------------------------------------------------------------------------------------|

### Ethernet

|                   |                                                             |
|-------------------|-------------------------------------------------------------|
| Controller/ Speed | 1 x Intel® I226IT with 10/100/1000/2500 Mbps, supports vPro |
|-------------------|-------------------------------------------------------------|

### I/O

|             |                                           |
|-------------|-------------------------------------------|
| HDMI        | DDI1/2 support HDMI/DP                    |
| DisplayPort | DDI1/2 support HDMI/DP<br>DDI3 support DP |
| LVDS        | 1                                         |
| eDP         | 1 (optional)                              |
| Ethernet    | 1 x 2.5 Gigabit LAN                       |
| USB         | 4 x USB 3.2 (Gen2), 8 x USB2.0            |
| COM         | Two UART Ports                            |
| GPIO        | 4 x GPI, 4 x GPO                          |

### Storage

|      |                                                             |
|------|-------------------------------------------------------------|
| SATA | 2 x SATA3 (6Gb/s)                                           |
| RAID | SATA: Intel® VMD RAID 0/1<br>PCIe: Intel® VMD RAID 0/1/5/10 |

### Security

|     |                               |
|-----|-------------------------------|
| TPM | TPM 2.0 onboard IC (optional) |
|-----|-------------------------------|

### Watchdog Timer

|          |                                  |
|----------|----------------------------------|
| Output   | From Super I/O to drag RESETCON# |
| Interval | 256 Segments, 0, 1, 2, ...255sec |

### Power Requirements

|           |                                                                                                                           |
|-----------|---------------------------------------------------------------------------------------------------------------------------|
| Input PWR | ATX: 12V±5%/5Vsb±5%<br>AT: 12V±5%                                                                                         |
| Power On  | AT/ATX Supported<br>- AT : Directly PWR on as power input ready<br>- ATX : Press button to PWR on after power input ready |

### Environment

|                    |                |
|--------------------|----------------|
| Operating Temp     | -40° C ~ 85° C |
| Storage Temp       | -40° C ~ 85° C |
| Operating Humidity | 5% ~ 90%       |
| Storage Humidity   | 5% ~ 90%       |