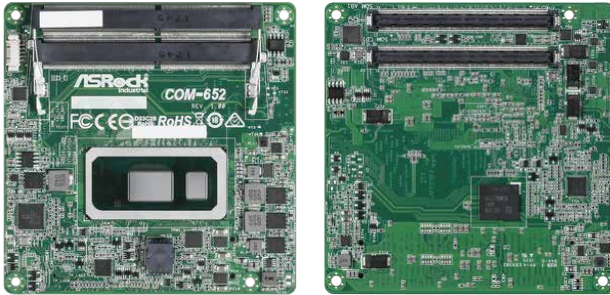




COM-652

COM Express Motherboard

KEY FEATURES



- Intel® 8th Gen (Whiskey Lake-U) Core™ Processors
- 2 x 260-pin SO-DIMM up to 32GB DDR4 2400 MHz (16GB per DIMM)
- 8 x PCIe x1 (Gen3), 4 x USB 3.2 Gen1, 8 x USB 2.0, 3 x SATA3
- 1 x Intel Gigabit LAN
- Supports Triple Display, 2x DDI, 1 x VGA, 1 x LVDS or eDP (optional)
- TPM 2.0 onboard IC (optional)
- Supports Intel® vPro, AMT (For i7/i5 SKU), RAID 0/1
- ATX: 12V±5%/5Vsb±5%
AT: 12V±5%

SPECIFICATIONS

Form Factor

| | |
|------------|--|
| Dimensions | COM Express Type6 (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 | COM Express Compact Size Type 6 Module with Intel® 8th Gen (Whiskey Lake-U) Core™ Processors -COM-652P (i7-8665UE, QC, 1.7GHz, 15 W) -COM-652M (i5-8365UE, QC, 1.6GHz, 15 W) -COM-652V (i3-8145UE, DC, 2.2GHz, 15 W) |
| Chipset | SoC |
| Socket | BGA1528 |
| BIOS | AMI SPI 128 Mbit |

Memory

| | |
|------------|----------------------------|
| Technology | Dual Channel DDR4 2400 MHz |
| Capacity | 32 GB (16 GB per DIMM) |
| Socket | 2 x 260-pin SO-DIMM |

Graphics

| | |
|--------------|--|
| Controller | Intel® Gen9 Graphics DX 11/12 |
| HDMI | HDMI 1.4b Max resolution up to 4096x2160p 24Hz |
| DisplayPort | DisplayPort 1.2, DP++ Max resolution up to 4096x2160@60Hz |
| VGA | Max resolution up to 1920x1200@60Hz |
| LVDS | Dual channel 24 bit up to 1920x1200@60Hz |
| eDP | eDP 1.4 Max resolution up to 3840 x 2160@60Hz(optional) |
| MultiDisplay | Triple Display |

Expansion

| | |
|------|--------------------|
| PCIe | 8 x PCIe x1 (Gen3) |
|------|--------------------|

Ethernet

| | |
|-------------------|---|
| Controller/ Speed | COM-652P/COM-652M: 1 x Intel® I219LM with 10/100/1000 Mbps, supports AMT/vPro COM-652V: 1 x Intel® I219V with 10/100/1000 Mbps |
|-------------------|---|

I/O

| | |
|-------------|---------------------------------------|
| HDMI | DD1 support HDMI/DP or VGA (optional) |
| DisplayPort | DDI2 support HDMI/DP |
| USB | 4 x USB 3.1 Gen1, 8 x USB 2.0 |
| VGA | 1 |
| LVDS | 1 (optional) |
| eDP | 1 (optional) |
| TPM | TPM 2.0 onboard IC (optional) |
| GPIO | 4 x GPI, 4 x GPO |
| Ethernet | 1 |

Storage

| | |
|------|----------------------|
| SATA | 3 x SATA3 (6Gb/s) |
| RAID | Intel® SATA RAID 0/1 |
| eMMC | 32GB (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% AT: 12V±5% |
| Power On | AT/ATX Supported - AT : Directly PWR on as power input ready - ATX : Press button to PWR on after power input ready |

Environment

| | |
|--------------------|----------------|
| Operating Temp | 0°C ~ 60°C |
| Storage Temp | -40° C ~ 85° C |
| Operating Humidity | 5% ~ 90% |
| Storage Humidity | 5% ~ 90% |