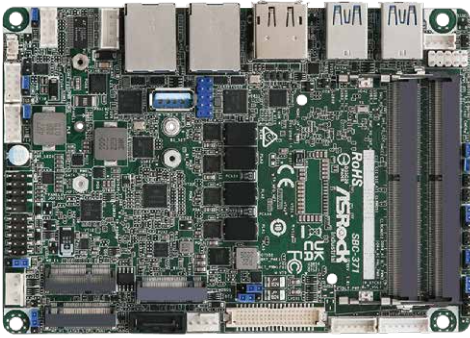


SBC-371

3.5" SBC Motherboard



KEY FEATURES

- Intel® 13th Gen Raptor Lake-P MCP Processors
- 2 x 260-pin SO-DIMM DDR4 3200 MHz, up to 64 GB (32GB per DIMM)
- 1 x PCIe x1, 2 x USB 3.2 Gen2x2, 3 x USB 3.2 Gen2, 2 x USB 2.0, 1 x M.2 Key M, 1 x M.2 Key E, 1 x M.2 Key B, 3 x COM, 1 x SATA3
- 2 x Intel 2.5 Gigabit LAN
- Supports Quad display, 1 x HDMI 2.0b, 3 x DP 1.4a (2 from Type-C), 1 x LVDS or eDP
- TPM 2.0 onboard IC
- Supports Intel® vPro (SBC-371P/SBC-371M), VMD RAID 0/1
- 12~36V DC-In PWR/ 12V DC-In only (BOM option)

SPECIFICATIONS

Form Factor

| | |
|------------|---|
| Dimensions | 3.5" SBC (5.8-in x 4-in x 0.94-in, 14.7 cm x 10.2 cm x 2.40 cm) |
|------------|---|

Processor System

| | |
|---------|---|
| CPU | Intel® 13th Gen (Raptor Lake-P) Core™ Processors SBC-371P (i7-1365UE, 2P+8E) SBC-371M (i5-1335UE, 2P+8E) SBC-371V (i3-1315UE, 2P+4E) |
| Chipset | MCP |
| BIOS | AMI SPI 256 Mbit |

Memory

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

Graphics

| | |
|--------------|---|
| Controller | Intel® Iris® Xe Graphics |
| HDMI | HDMI 2.0b Max resolution up to 4096 x 2160@60Hz |
| DisplayPort | DP 1.4a Max resolution up to 4096 x 2160@60Hz |
| LVDS | Dual channel 24 bit up to 1920 x 1200@60Hz (Connector shared with eDP) |
| eDP | Max resolution up to 1920 x 1080@60Hz (Connector shared with LVDS) |
| MultiDisplay | Quad display (Included 2 output from Type-C) |

Expansion Slot

| | |
|------------|---|
| PCIe | 1 x PCIe x1 Gen3 (supports up to 10W) |
| M.2 | 1 x M.2 (Key E, 2230) with PCIe x1, USB 2.0 and CNVi for Wireless 1 x M.2 (Key B, 3042/3052) with PCIe x1 or SATA3 and USB 3.2 and USB 2.0 and SIM for 4G/5G |
| SIM Socket | 1 x SIM socket connected to M.2 key B |

Audio

| | |
|-----------|--|
| Interface | Realtek ALC256 HD, High Definition Audio. Line-out, Mic-in |
|-----------|--|

Ethernet

| | |
|-------------------|--|
| Controller/ Speed | SBC-371P/SBC-371M LAN1: Intel® I226LM with 10/100/1000/2500 Mbps, supports vPro LAN2: Intel® I226V with 10/100/1000/2500 Mbps SBC-371V LAN1: Intel® I226LM with 10/100/1000/2500 Mbps LAN2: Intel® I226V with 10/100/1000/2500 Mbps |
| Connector | 2 x RJ-45 |

Rear I/O

| | |
|-------------|--|
| HDMI | 1 x HDMI 2.0b |
| DisplayPort | 1 x DP 1.4a |
| Ethernet | 2 x 2.5 Gigabit LAN |
| USB | 2 x USB 3.2 Gen2 2 x USB 3.2 Gen2x2 (Type-C, 5V/3A, support DP 1.4a display output) |

Internal Connector

| | |
|-----------------|---|
| USB | 1 x USB 3.2 Gen2 2 x USB 2.0 (1x2.54 pitch header) |
| COM | COM1, COM3, COM4 (RS-232/422/485) |
| GPIO | 4 x GPI, 4 x GPO |
| LVDS | 1 (Connector with LVDS/eDP signal, switch by BIOS) |
| SATA PWR Output | 1 |
| Speaker Header | 1 |

Storage

| | |
|------|---|
| M.2 | 1 x M.2 (Key M, 2242/2260/2280) with PCIe x4 for SSD |
| SATA | 1 x SATA3 (6Gb/s) |
| RAID | Intel® VMD RAID 0/1 **supported by PCIe interface PCIe interface: M.2 Key B + M.2 Key M |

Security

| | |
|-----|--------------------|
| TPM | TPM 2.0 onboard IC |
|-----|--------------------|

Watchdog Timer

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

Power Requirements

| | |
|-----------|---|
| Input PWR | 12~36V DC-In with 4-pin wafer PWR cable or DC Jack 12V DC-In only (BOM option) |
| 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 | -20°C ~ 70°C |
| Storage Temp | -40°C ~ 85°C |
| Operating Humidity | 5% ~ 90% |
| Storage Humidity | 5% ~ 90% |

BLOCK DIAGRAM

