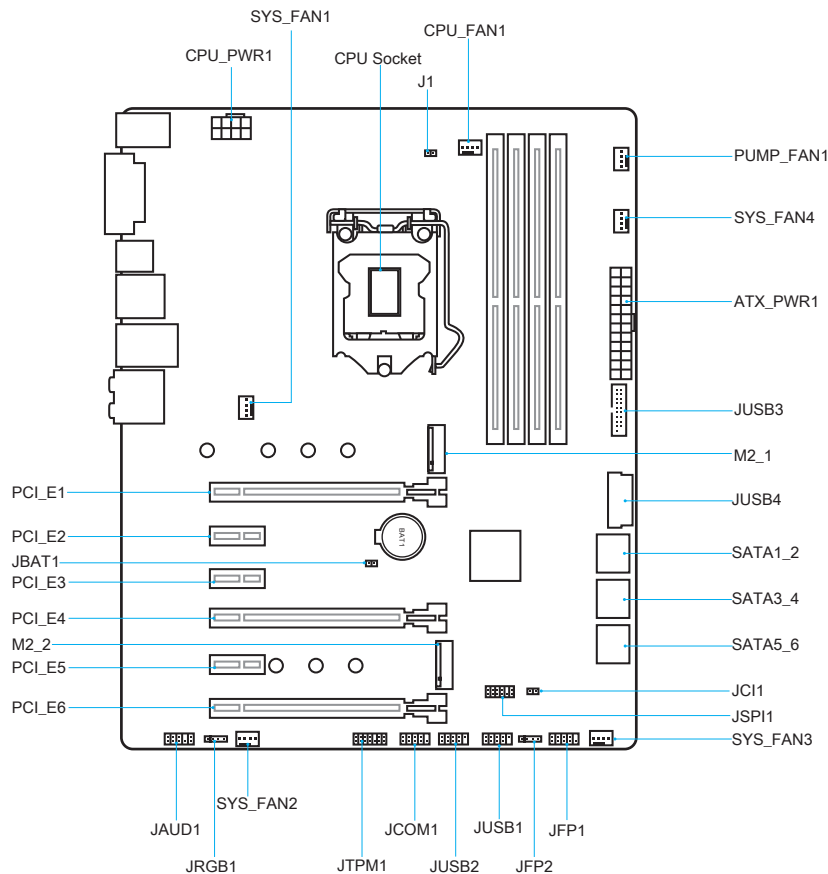


Z370 TOMAHAWK

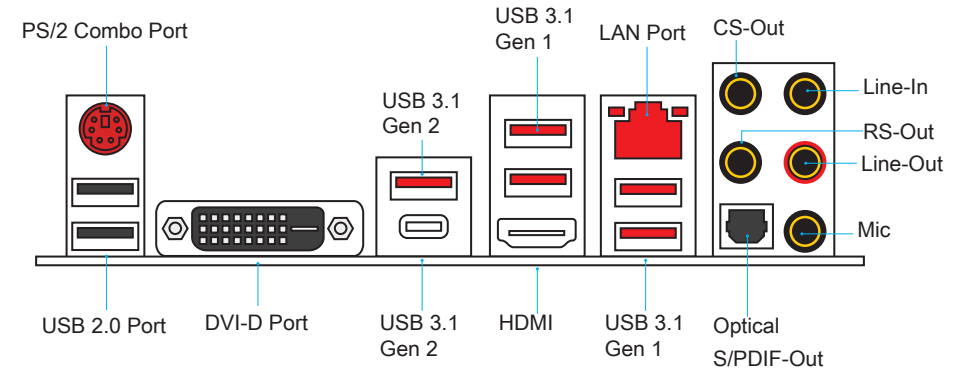
(MS-7B47 v1.0)

ATX Motherboard

Motherboard Components Overview



Rear I/O Panel



Motherboard Specification

CPU Support

- Supports 8th Generation Intel® Core™ Processors, and Intel® Pentium® and Celeron® Processors for Socket LGA1151

Chipset

- Intel® Z370 Express Chipset

Memory Support

- 4 x DDR4 memory slots supporting up to 64GB
 - Supports DDR4-3800+(OC) Memory
 - Support Dual-Channel mode
 - Support non-ECC, un-buffered memory
 - Supports Intel® Extreme Memory Profile (XMP)
- * Please refer www.msi.com for more information on compatible memory*

Expansion Slots

- 1x PCIe 3.0 x16 slot (From CPU)
- 2x PCIe 3.0 x16 slots (From PCH)
- 3x PCIe 3.0 x1 slots (From PCH)

Onboard Graphics

- 1x HDMI™ port, supports a maximum resolution of 4096x2160@30Hz(8th CPU), 4096x2160@24Hz(6th CPU), 2560x1600@60Hz
- 1x DVI-D port, supports a maximum resolution of 1920x1200@60Hz

Multi-GPU Support

- Supports 2-Way AMD® Crossfire™

Storage

- Intel® Z370 Chipset
- 6x SATA 6Gb/s ports
- 1x M.2 ports, supports PCIe 3.0 x4 and SATA 6Gb/s standards, 4.2cm/ 6cm/ 8cm/11cm length SSD cards
- 1x M.2 port, supports PCIe 3.0 x4 and SATA 6Gb/s standards, 4.2cm/ 6cm/ 8cm length SSD cards
- Supports RAID 0, RAID1, RAID 5 and RAID 10

Motherboard Specification

- Intel® Optane™ Memory Ready Intel® Z370 Express Chipset

USB

- Intel® Z370 Chipset
 - ▶ 8x USB 3.1 Gen1 (4 ports on the back panel, 4 ports available through the internal USB connectors)
 - ▶ 6x USB 2.0 ports (2 ports on the back panel, 4 ports available through the internal USB connectors)
- ASMedia® ASM3142 Chipset
 - ▶ 2x USB3.1 Gen2 Type-A / Type-C ports (2 ports on the back panel)

Audio

- Realtek® ALC892 Codec
- 7.1-Channel High Definition Audio
- Supports S/PDIF output

LAN

- 1x Intel I219-V Gigabit LAN controller

Back Panel Connectors

- 1x PS/2 keyboard/ mouse port
- 1x HDMI port
- 1x DVI- D port
- 2x USB 2.0 ports
- 4x USB 3.1 Gen 1 ports
- 1x USB 3.1 Gen2 Type-A port
- 1x USB 3.1 Gen2 Type-C port
- 1x LAN(RJ45) port
- 5x OFC audio jacks
- 1x Optical S/PDIF OUT connector

Internal Connectors

- 1x 24-pin ATX main power connector
- 1x 4-pin ATX 12V power connector
- 6x SATA 6Gb/s connectors
- 2x USB 2.0 connectors (supports additional 4 USB 2.0 ports)
- 2x USB 3.1 Gen1 connectors (supports additional 4USB 3.1 Gen1 ports)

- 1x 4-pin CPU fan connector
- 1x 4-pin PUMP fan connector
- 4x 4-pin system fan connectors
- 1x 4-pin RGB LED connector
- 1x com port connector
- 1x Clear CMOS jumper
- 1x Front panel audio connector
- 2x Front panel connectors
- 1x Chassis Intrusion connector
- 1x Refresh BIOS
- 1x TPM module

I/O Controller

- NUVOTON NCT6795 Controller Chip

Hardware Monitor

- CPU/System temperature detection
- CPU/System fan speed detection
- CPU/System fan speed control

BIOS Features

- 1x 128 Mb flash
- UEFI AMI BIOS
- ACPI 6.0 , SMBIOS 3.0
- Multi-language

Arsenal GAMING features

- Audio
 - Audio Boost
- Network
 - ▶ GAMING LAN with Gaming LAN Manage
 - ▶ WTFast
- Storage
 - ▶ Twin Turbo M.2
 - ▶ M.2 Genie
 - ▶ Intel® Optane™ Memory Ready
- Fan
 - ▶ Pump Fan
 - ▶ Smart Fan Control
- LED

- ▶ Mystic Light
 - ▶ Mystic Light Extension (RGB)
 - ▶ Gaming DNA with bottom LED
 - ▶ Mystic light SYNC
 - ▶ EZ DEBUG LED
- Protection
 - ▶ PCIe Steel Armor
- Performance
 - ▶ Multi GPU-CrossFire Technology
 - ▶ DDR4 Boost
 - ▶ GAME Boost
 - ▶ Lightning USB
 - ▶ USB with type A+C
 - ▶ X-Boost

- Stability
 - ▶ Military Class 5
 - ▶ 7000+ Quality Test
- VR
 - ▶ VR Ready
- Gamer Experience
 - ▶ Dragon eye
 - ▶ Xsplit
 - ▶ RAMDisk
 - ▶ GAMING HOTKEY
- BIOS
 - ▶ Click BIOS 5
- Certification
 - ▶ GAMING Certified
 - ▶ SteelSeries Certified

Software Features

- Command Center
- Command Center Lite
- Command Center Lite Memory
- Live Update 6
- Fast Boot
- Super Charger
- DPC Latency Tuner

- X-boost
- MSI smart tool
- GAMING APP
- GAMING LAN manager
- XSplit Gamecaster V2
- SteelSeriesEngine 3
- Dragon eye
- WTFast
- Intel Extreme Tuning Utility
- Norton Internet Security Solution
- Google Chrome
- Google Toolbar
- Google Drive
- CPU-Z MSI GAMING

Form Factor

- ATX
- 30.4 cm x 24.3 cm