



Features

- 9th Gen Intel® Xeon® E/ Core™ i7/i5/i3 processors
- 4x DDR4 DIMM, Max.128GB
- Intel® processor integrated graphics supports HDMI(2.0a), DVI-D, and DisplayPort
- Dual Intel® Gigabit LAN
- 6x USB3.1, 2x USB 2.0, 4x SATA 3.0, 6x COM
- 1x PCI-E(x16), 1x PCI-E(x8)(Gen3.0), 1x PCI-E(x4), 2x PCI-E(x1), 2x PCI
- Watchdog timer, Digital I/O, iAMT (11.6), TPM(2.0), iSMART (4.0)

Specifications

CPU Socket	LGA1151
CPU	9th Gen Intel® Xeon® E/ Core™ i7/i5/i3 HC/QC/DC processors, up to 5.0GHz
PCH	MB997AF-C246: Intel® C246 PCH MB997AF: Intel® Q370 PCH MB997EF: Intel® H310 PCH
Memory Types	4x DDR4-2666 / 2400 MHz, Max. 128GB (Supports ECC by CPU SKUs)
BIOS	AMI
Watchdog Timer	256 levels
H/W Monitor	Yes
Storage Device Interface	NVMe
Expansion Slots	MB997AFS-C246/ MB997AFS: 1x PCI-E (x16), 1x PCI-E(x8), 1x PCI-E(x4), 2x PCI-E (x1), 2x PCI MB997EFS: 1x PCI-E (x16), 2x PCI-E (x1), 2x PCI
Mini Type Slots	1x MiniPCI-E, 1x M.2 (M-Key, type:M2280), 1x M.2 (E-Key, type: E2230)
Graphics Controller	9th Gen Intel® Core™ i7/i5/i3 processors integrated
Video Output	1x HDMI2.0a, 1x DVI-D, 1x DisplayPort (1.2)(DP++)
Ethernet	LAN 1: MB997AF-C246/MB997AF: Intel® I219LM GbE PHY MB997EF: Intel® I219V GbE PHY LAN 2: MB997AF-C246: Intel® I210AT GbE MB997AF/ EF: Intel® I211AT or I210AT GbE
I/O Chip	Nuvoton NC T6686D-T
Serial Port	4x RS232, 2x RS232/422/485
USB 2.0	2x USB2.0 via pin header
USB 3.X	MB997AF-C246/MB997AF: 4x USB3.1 Gen2 (10Gpbs), 2x USB3.1 Gen1 (5Gpbs), 2x USB3.1 Gen1 (5Gpbs) via box-header MB997EF: 4x USB3.1 Gen2 (10Gpbs)
Serial ATA	4x SATA 3.0
Audio	Intel® CNL PCH-H built-in HD audio + Realtek ALC888S codec
TPM	TPM (2.0)
Others	Digital I/O(4-in/4-out), iAMT (11.6), RAID, iSMART (4.0), EuP/ErP

Dimensions (L x W)	305mm x 244mm (12" x 9.6")
Power Consumption	Intel® Core™ i7-9700K, 3.6GHz w/ 4x 4GB DDR4-2400 +12V: 12.64A +5V: 1.19A +5VSB: 0.132A +3.3V: 0.88A
Operating Temperature	0°C~60°C (32°F~140°F)
Storage Temperature	-20°C~80°C (-4°F~176°F)
Relative Humidity	95% (non-condensing @60°C)

Ordering Information

MB997AFS-C246	LGA1151 C246 ATX Motherboard w/ HDMI, DisplayPort, DVI-D, dual Gigabit LAN, RAID, iAMT (11.6), TPM (2.0), iSMART (4.0)
MB997AFS	LGA1151 Q370 ATX Motherboard w/ HDMI, DisplayPort, DVI-D, dual Gigabit LAN, RAID, iAMT (11.6), TPM (2.0), iSMART (4.0)
MB997EFS	LGA1151 H310 ATX Motherboard w/ HDMI, DisplayPort, DVI-D, dual Gigabit LAN, TPM (2.0), EuP/ErP

Dimensions and Drawing

