



239.00 EUR  
incl. 19% VAT, plus [shipping](#)

- 2x Gigabit LAN !
- DC-in 12~24V !
- 2x m.2, 1x miniPCIe !
- 5 phase power design !

- Up to Intel® Coffee Lake-R 9th i9 35W & 8th i7 95W (6 cores) LGA processor
- Intel® H310/Q370 Chipset
- Intel® vPro technology support (Q370)
- 2 x DDR4 SO-DIMM up to 32GB
- 5 phase power design
- Support triple display for HDMI, DisplayPort and LVDS/eDP
- 1 x M.2 M 2280, 1 x M.2 E 2230, 1 x mPCIe Full size, 1 x PCIe X16
- 2 x Intel® Gigabit Ethernet
- DC-in 12~24V (3-pin Power Connector included)

MECHANICAL	FORM FACTOR	Mini-ITX: 6.7" x 6.7" (170 mm x 170 mm)	
	PROCESSOR	9th & 8th Gen Intel Coffee Lake LGA1151 Socket Processor, Core i7/i5/i3 6-core TDP Max. 95W, Core i9 8-core TDP Max 35W	
		CHIPSET	Intel® H310 / Intel® Q370 (Support RAID 0 / 1 & vPro)
	SYSTEM MEMORY	DDR4 2666MHz / 2 x 260-pin SO-DIMM / Max. 32GB (Non-ECC)	
	GRAPHICS	Intel® HD Graphics	
	ETHERNET	Intel® I219-LM Giga LAN + Intel® I210-AT Giga LAN	
	SYSTEM	I/O CHIPSET	Nuvoton NCT6116D
		AUDIO	Realtek® ALC662
		TPM	TPM Header
		EXPANSION SLOT	*H310 only support M.2 SATA SSD / PCIe 3.0 X16 slot / M.2 2230 E key (PCIe, USB 2.0) / M.2 2242 / 2280 M key (PCIe, SATA) / Mini PCIe Full size (PCIe / USB / SATA)
BIOS			AMI BIOS / 256 Mbit SPI
H/W MONITOR			Temperature Monitor / Voltage Monitor / Fan Monitor
WATCHDOG TIMER			1~255 steps by software program
GRAPHICS		SMART FAN CONTROL	CPU Fan / System Fan
		2nd DISPLAYPORT	Up to 4K (4096 x 2304) @60 Hz
		VGA	-
	DVI	-	
	HDMI	Up to 4K (4096 x 2160) @30 Hz	
	DISPLAYPORT	Up to 4K (4096 x 2304) @60 Hz	
	LVDS	Up to 1920 x 1200 @60 Hz	
	eDP (Option)	Up to 4K (4096 x 2304) @60 Hz	
	USB	4 x USB 3.0 (H310) / 4 x USB 3.1 Gen 2 (Q370)	
	DISPLAY I/O	1 x HDMI 1.4 / 2 x DisplayPort 1.2	
REAR I/O	AUDIO I/O	1 x Mic-in / 1 x Line-out	
	LAN I/O	2 x RJ-45	
	SERIAL PORT	-	
	PS/2 PORT	-	
	OTHERS	DC-in 12V(DIN 4-pin)	

	STORAGE	2 x SATAIII
	USB	5 x USB 2.0 (Q370) / 4 x USB 2.0 (H310)
	DISPLAY I/O	1 x LVDS (*Optional eDP SKU available) / 1 x Backlight Connector
	AUDIO I/O	1 x Stereo Speaker Header
	SERIAL PORT	4 x RS232 (Two supports RS232 / 422 / 485 select by BIOS)
	PARALLEL PORT	-
INTERNAL CONNECTORS	GPIO	1 x MiAPI Header (Programmable. Support 10-bit GPIO)
	FAN	1 x 4-pin CPU Fan Header / 1 x 4-pin System Fan Header
	POWER	1 x AT / ATX Mode Select Jumper / 1 x 4-pin ATX Power Connector
	OTHERS	1 x CMOS Jumper / 1 x Front Audio Header (Mic-in & Line-out) / 1 x panel power select header / 1 x backlight power select header, / 1x buzzer header
POWER REQUIREMENT	POWER INPUT	*optional 12V-24V via DC to DC power board / DC-in 12V(DIN 4-pin)/ ATX 4-pin 12V
	OPERATING TEMPERATURE	0 ~ 60°C (32 ~140°F)
ENVIRONMENTAL	STORAGE TEMPERATURE	-40 ~ 85°C (-40 ~185°F)
	OPERATING HUMIDITY	10% ~ 95% R/H (Non-condensing)
	CERTIFICATION	CE / FCC Class B
OS	OS SUPPORT	Windows® 10 64-bit / Linux (support by request)
PACKING LIST	PACKAGE	1 x Motherboard / 1 x 50 cm SATA Cable / 2 x I/O Bracket (Half and Full Height) / 1 x Driver CD / 1 x Quick Installation Guide