

TECH-7120-MAX

Micro-ATX based Industrial Desktop PC with 8th/9th Generation Intel® Core™ Processor, DDR4 DRAM

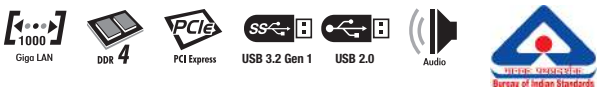


Specifications

System	
Processor	8th/9th Generation Intel® (Coffee Lake-S/Coffee Lake-S Refresh) Core™ i9/ i7/ i5 /i3, Pentium 14nm LGA 1151 socket Processor
Chipset	Intel® H310 Express Chipset
Memory	DIMM x 2, DDR4 (2666/2400/2133 MHz, max. 64GB) non-ECC, un-buffered memory Dual-channel memory architecture
I/O Chipset	NCT6793D+ F81216HD
Ethernet	Intel® PHY i219V Gb LAN x 1 Intel® i210AT Gb LAN x 1 RJ45 x 2
Audio	Realtek® ALC897 6-Channel High Definition Audio CODEC
TPM	Nuvoton NPCT750 TPM2.0 onboard
Expansion Slots	PCIe 3.0[x16] Slot x 1 PCIe 2.0[x1] Slot (open edge) x 3 M.2 2280 M-key (BOM option: PCIe or SATA; default: SATA) x 1
BIOS	128Mbit Flash ROM, AMI BIOS
H/W Monitor	Temperature Monitor on CPU/System, Voltage Monitor on Vcore/5V/3.3V/12V, Fan Monitor on CPU/Chassis
WatchDog Timer	1~255 steps by software program
Smart Fan Control	CPU Fan x 1 Chassis Fan x 2
Wake On LAN/ PXE	Yes (WOL / PXE)
Power State	S3, S4, S5
Graphics	
Graphics Chipset	Intel® UHD Graphics
Graphics Multi Display	VGA+DP; VGA+HDMI; DP+HDMI
VGA	Up to 1920 x 1200 @60Hz (via IT6516B)
DVI	—
HDMI	Up to 4096 x 2160 @ 24 Hz / 2560 x 1600 @ 60 Hz, with Digital Audio
Display Port	Up to 4096 x 2160 @ 24 Hz / 3840 x 2160 @ 60 Hz, with Digital Audio
LVDS	—
eDP	—
Backlight Control	—
Environment & Power & ME	
Battery	Lithium battery
Power Requirement	110-240 V AC Input
Operation Temperature	32°F ~140°F (0°C ~ 60°C)
Storage Temperature	-40°F ~185°F (-40°C ~85°C)
Operation Humidity	0%~90%RH, non-condensing
Certificate	BIS
Form Factor, Dimensions	Desktop/Wallmount Form Factor, 15" x 6.5" x 12.5" (380 x 164 x 316.5mm)

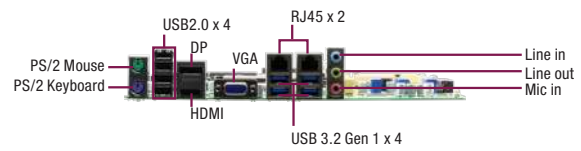
Features

- 8th/9th Generation Intel® Core™ LGA1151 Processor
- DDR4 2666/2400/2133 MHz, max. 64GB
- Independent Displays: HDMI x 1, VGA x 1, DP x 1
- Dual Intel® Gigabit Ethernet, i210AT x 1, i219V x 1
- USB 3.2 Gen 1 ports x 4, USB 2.0 ports x 6
- M.2 M-key (PCIe or SATA) x 1, up to 5 SATA III (Optional)
- TPM Onboard

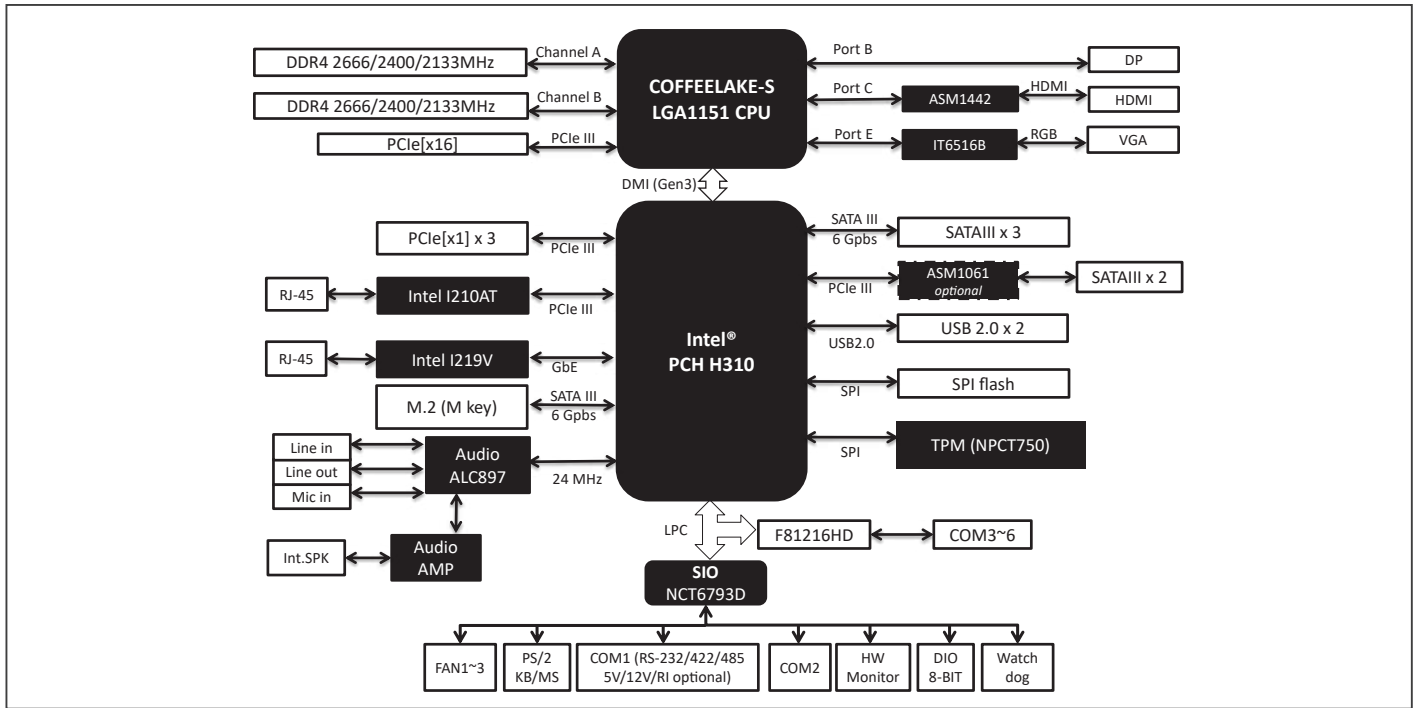


Weight	10 Kg approx
MTBF (Hours)	261,090
Rear Panel I/O Ports	
USB	USB 3.2 Gen 1 ports (5 Gbps) x 4, USB 2.0 ports x 4
Display I/O	DP x 1, VGA x 1, HDMI x 1
Audio I/O	Audio Jack x 3: Line-in, Mic-in, Line-out
LAN I/O	LAN (RJ45) ports x 2
Serial Port	—
PS/2 Port	PS/2 stack Port (Keyboard & Mouse) x 1
Others	—
Internal I/O Connectors	
Storage	SATA III (6.0Gb/s) ports x 3; BOM option: can support additional 2 SATA M.2 2280 M-key (BOM option: PCIe or SATA; default: SATA) x 1
USB	USB 2.0 header support additional 2 USB ports (2x5PIN, p=2.54mm) x 1
Display I/O	—
Audio I/O	Speaker header (Line-out) x 1, AAFP x 1
Serial Port	RS-232Box headers x 5 RS-232/422/485Box header (COM1, Pin9 supports 5V/12V/Rl optional) x 1
PS/2 Port	—
Parallel Port	—
DIO	8-bit Digital I/O interface (In/Out programmable) x 1
FAN	CPU Fan connector (4-pin) x 1 Chassis Fan connector(s) (4-pin) x 2
Power	—
Others	Chassis intrusion x 1 AT/ATX mode select jumper x 1 Front panel header x 1 Clear CMOS jumper x 1 LPC box header x 1
OS	
OS Support	Windows® 10 64bit, Linux Ubuntu 64bit (18.04.1/Kernal4.8.0)

Rear View



Block Diagram



Ordering Information

Part number	CPU	RAM	Fan/ Fanless	Display	LVDS	Storage	LAN	USB	RS-232	RS- 232/422/485	Expansion Slot	Power	TPM	Temp.
TECH-7120-MAX	LGA 1151 socket	DDR4 2666/2400/2133	Fan	HDMI x 1 VGA x 1 DP x 1	—	SATA3 x 3 M.2 2280 M-key (SATA) x 1	Intel@GbE x 2	USB 3.2 Gen 1 x 4 USB 2.0 x 6	5	1	PCIe[x16] x 1 PCIe[x1] x 3 M.2 2280 M-key (SATA) x 1	ATX	on-board	32°F ~140°F (0°C ~ 60°C)

Front View



Inside View



Easy-to-maintain fan filter



User-friendly mechanical design for installing an add-on card