

TECH-7120-11G

Mini-ITX based Industrial Desktop PC with Intel® 11th Gen Core™ U-Processor, Max. 28W TDPs, 4Display output, 2.5GbEx1 + 1GbEx1



Specifications

| System | |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Processor | Intel® 11th Gen (Tiger Lake-UP3) Core™ Processors, up to 28W TDPs - i7-1185G7E, QC, Max Speed up to 4.4GHz - i5-1145G7E, QC, Max Speed up to 4.1GHz - i3-1115G4E, DC, Max Speed up to 3.9GHz - Celeron 6305E, DC, 1.8GHz |
| Chipset | — |
| Memory | DDR4 2666/3200 MHz SODIMM x 2, Up to 64GB |
| I/O Chipset | IT5121E |
| Ethernet | Intel® PCIe Gb LAN 219LM x 1 Intel® PCIe Gb LAN 225LM x 1 |
| Audio | Realtek® ALC897 |
| TPM | Nuvoton NPCT750 TPM2.0 onboard |
| Expansion Slots | PCIe 3.0 [x4] x 1, mini-card x 1(PCIe/SATA; BOM Optional) |
| BIOS | 256Mbit Flash ROM, AMI BIOS |
| H/W Monitor | Temperature Monitor on CPU/Chassis, Voltage Monitor on Vcore/5V/12V, Fan Monitor on CPU/Chassis |
| WatchDog Timer | 1~255 step by software program |
| Smart Fan Control | CPU Fan/ Chassis Fan |
| Wake On LAN/ PXE | Yes (WOL / PXE) |
| Power State | S3, S4, S5 |
| Graphics | |
| Graphics Chipset | Intel® Xe(Gen 12) Graphics |
| Graphics Multi Display | Quad Display |
| VGA | — |
| DVI | — |
| HDMI | HDMI 2.0 |
| Display Port | DP1.4 |
| LVDS | Up to 1920 x 1200 @60Hz, Dual Channel 18/24 bit (via CH7511B) |
| eDP | eDP1.4b |
| Backlight Control | — |
| Environment & Power & ME | |
| Battery | Lithium battery |
| Power Requirement | 110-240 V AC Input |
| Operating Temperature | 32°F ~122°F (0°C ~ 50°C) |
| Storage Temperature | -40°F ~185°F (-40°C ~85°C) |
| Operating Humidity | 0%~90%RH, non-condensing |
| Certificate | CS |
| Form Factor, Dimensions | Desktop/Wallmount Form Factor, 15" x 6.5" x 12.5" (380 x 164 x 316.5mm) |
| Weight | 9.5 Kg |
| MTBF (Hours): | — |

Features

- 11th Gen. Intel® Core™ Processor
- DDR4 SODIMM x 2, Max. 64GB
- M.2 Slot (M key; 2280) x 1, mini card x 1
- USB 3.2 Ports x 4, USB 2.0 Ports x 4
- Intel® LAN 225LM x 1, 219V x 1
- HDMI2.0 x 2, DP1.4 x 2
- LVDS x 1, eDP x 1
- PCI-Express [x4] x 1



Rear Panel I/O Ports

| | |
|-------------|------------------------------|
| USB | USB 3.2 Gen2 x 2, USB2.0 x 4 |
| Display I/O | HDMI x 2, DP++ x 2 |
| Audio I/O | Mic-in x 1, Line out x 1 |
| LAN I/O | 1GbE x 1, 2.5GbE x 1 |
| Serial Port | — |
| PS/2 Port | — |
| Others | — |

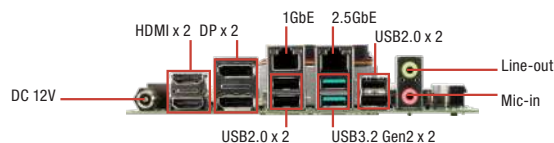
Internal I/O Connectors

| | |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Storage | M.2 M key (2280) for (NVMe;PCIex4) storage x 1 SATA 6.0Gb/s x 1 |
| USB | USB 3.0 Box header x 1 (support additional USB3.2 Gen1 x 2ports) |
| Display I/O | 40-pin LVDS connector x 1, 40-pin eDP connector x 1 |
| Audio I/O | AAFP follow ASUS pin out x 1 |
| Serial Port | Box header x 2 for COM (COM1/2: RS-232) |
| PS/2 Port | — |
| Parallel Port | — |
| DIO | Digital I/O box header x 1 |
| FAN | 4-pin CPU Fan connector x 1 4-pin Chassis Fan connector x 1 |
| Power | — |
| Others | Front Panel connector x 1, Chassis Intrusion x 1, Buzzer onboard x 1, Clear CMOS jumper x 1, AT/ATX mode select jumper x 1; SIM socket x 1 |

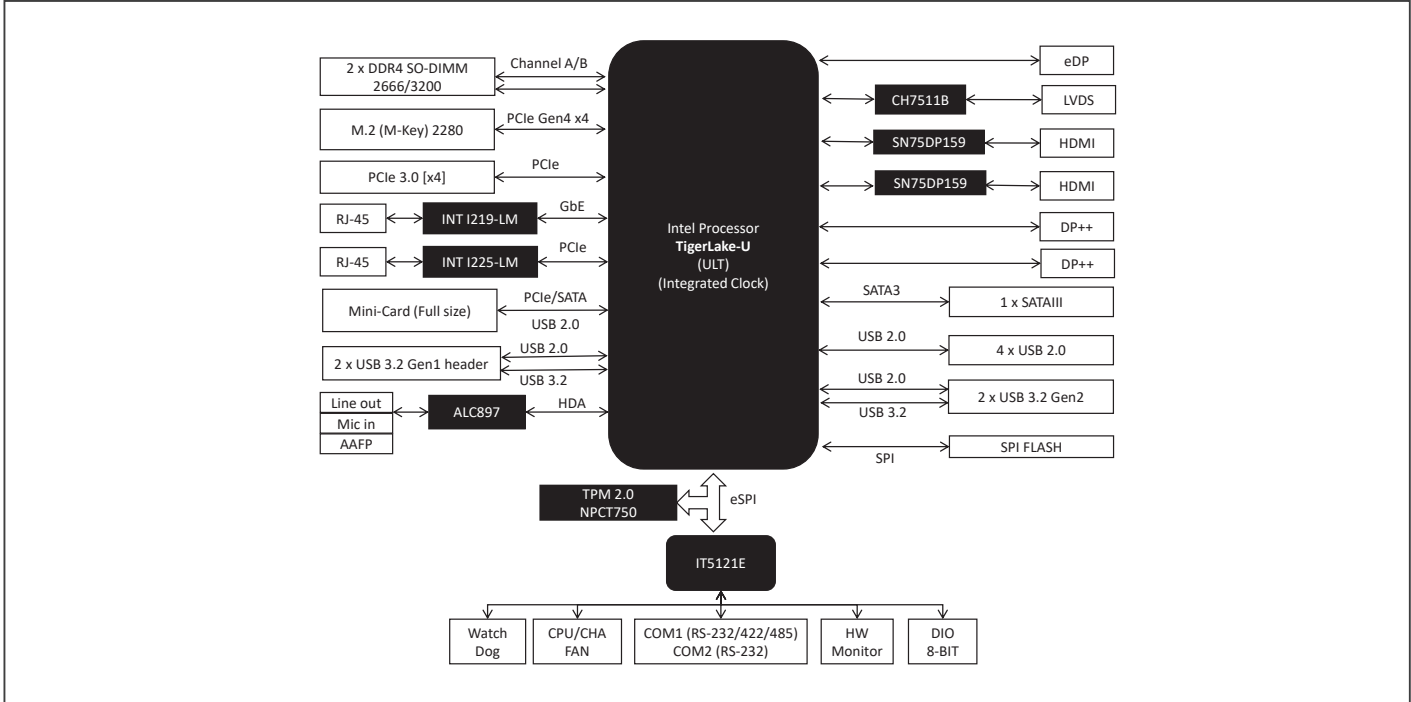
OS

| | |
|------------|----------------------------------------|
| OS Support | Windows® 10 64-bit, 20.04.2/Kernel 5.8 |
|------------|----------------------------------------|

Rear View



Block Diagram



Ordering Information

| Part number | RAM | Fan/Fan-less | Display | LVDS | Storage | LAN | USB | RS-232 | RS-232/422/485 | Expansion Slot | TPM | Temp |
|---------------|------------|--------------|-------------|------------------------|------------------------|----------------------|--------------------------------|--------|----------------|--------------------|--------|---------------------------|
| TECH-7120-11G | SODIMM x 2 | Fan | HDMIx2,DPx2 | Dual Channel 18/24 bit | SATA3 x 1, M.2 (M-key) | 2.5GbE x 1, 1GbE x 1 | USB 2.0 x 4, USB 3.2 Gen 1 x 4 | 2 | 0 | Mini-PCIe[x1] x 1, | TPM2.0 | 32°F ~ 122°F (0°C ~ 50°C) |

Note: All specifications are subject to change without notice.