BMX-T528

Mini-ITX Desktop System w/ Intel® Tiger Lake



Features

- 11th Generation Intel® Tiger Lake-UP3 Processors
- Intel® Iris® Xe/ UHD Graphics Engine
- 2 x 260-pin DDR4 SODIMM Socket, Supports Up to 64GB DDR4 3200MTs SDRAM
- 2 x Intel® Ethernet Controller (1GbE, 2.5GbE)
- Support 5G (Sub-6G) module (SIM Card extrapolation)
- Win10/Win 11 64bit, Linux
- Front I/O: 4 x USB2.0, 4 x DB9, 4 x Antenna, 1 x SIM slot, all for optional
- Rear I/O: 2 x DP or 4 x DP, 4 x USB3.2 Gen1, 2 x LAN, Power Button
- 2 x DP or 4DP, 1 x LVDS for DB26 optional with BIOS and Cables
- DC power input from +24V
- Fanless operation Temperature from 0°C ~ 50°C

4 USB

6 COM

Specifications

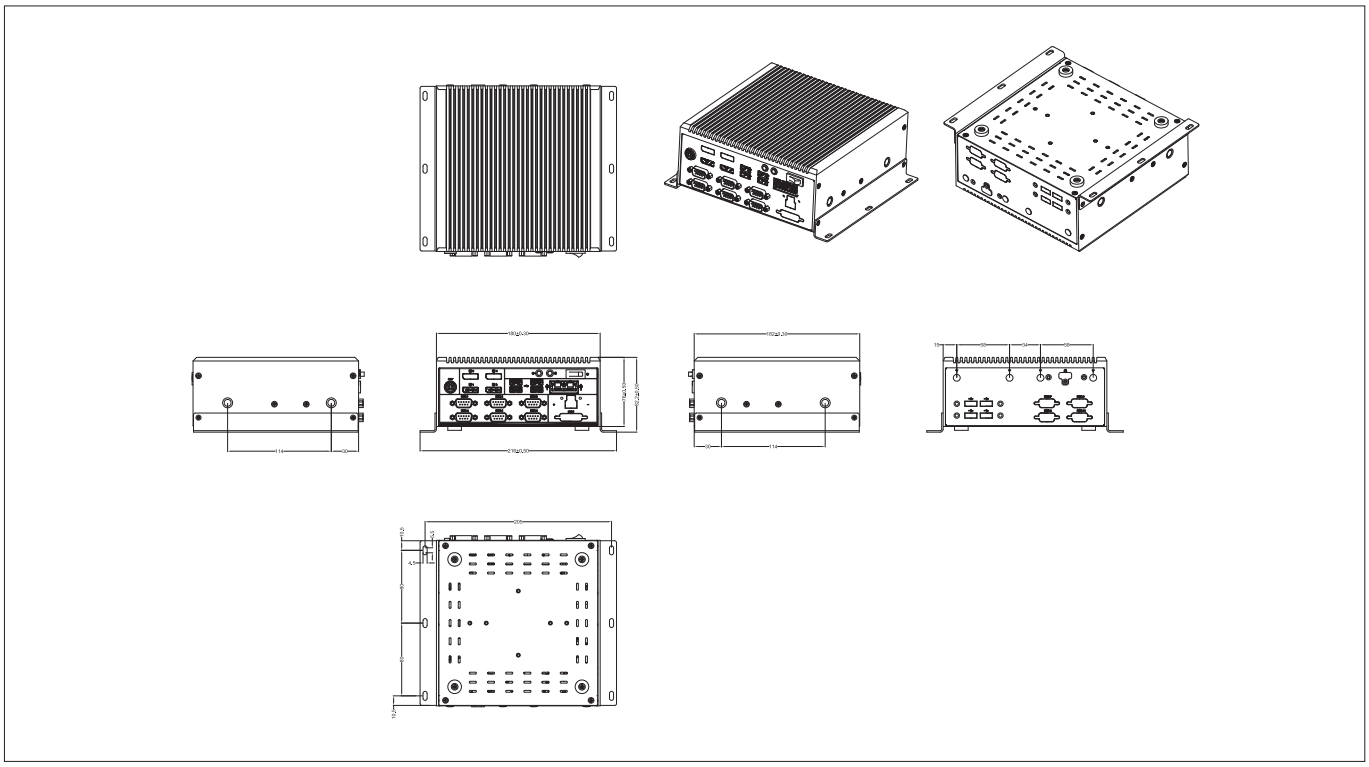
System Information	
Processor	11th Gen Intel® Core™ Processors, BGA 1449 (former Tiger Lake-UP3) Intel® Core™ i7-1165G7 Processor, 4C8T, 12M Cache, 2.8GHz (4.7GHz), TDP: 15W Intel® Core™ i5-1135G7 Processor, 4C8T, 8M Cache, 2.4GHz (4.2GHz), TDP: 15W
Platform Controller Hub	Soc
System Memory	2 x 260-pin DDR4 SO-DIMM Socket, Supports Up to 64GB DDR4 3200MTs SDRAM
I/O Chipset	NuvoTon_NCT6126D
BIOS Information	AMI uEFI BIOS, 256Mbit SPI Flash ROM
Watchdog Timer	H/W Reset, 1sec. ~ 65535sec./min.1sec. or 1min. step
H/W Status Monitor	CPU temperature monitoring Voltage monitoring CPU fan speed control
RAID	RAID0/1 (only Core i)
TPM	dTPM 2.0 (NuvoTon NPCT754AADYX)
SBC	EMX-TGLC-B1, AUX-089 (SIM card adapter)
Expansion	
M.2	1 x M.2 Type B 3042/3052/2242/2260/2280 1 x M.2 Key E 2230 support WiFi module and CNVi (1 x PCI-e x1 & USB 2.0 Signal)
Storage	
M.2	1 x M.2 Type B 3042/3052/2242/2260/2280 NVMe SSD *SATA 2 share with M.2 key B SATA *Only Support PCI-e x1 signal module
2.5 Drive Bay	2 x 2.5" Drive Bay (9.5mm)
Front I/O	
USB	4 x USB2.0 optional
COM Port	4 x COM optional
SIM Slot	1 x Internal SIM slot
Antenna	4 x Antenna with dust cover
Rear I/O	
USB	4 x USB 3.1 Gen2 (Edge)
Power Button	1 x Push Button for Power on/off
COM Port	2 x RS/232/RS422/485, 4 x RS-232
LED Indicator	1 x Power LED 1 x Storage LED (Red)

LAN Port	2 x RJ45
HDMI	2 x DP or 4 x DP
AC/DC Input	1 x 4P Mini Din Jack (Edge) 1 x 2P Terminal Black (cable)
Right I/O	
Antenna	2 x Antenna with dust cover
Left I/O	
Antenna	2 x Antenna with dust cover
Display	
Graphic Chipset	Intel® Iris® Xe Graphics (i7-1165G7/ i5-1135G7) Intel® UHD Graphics for 11th Gen Intel® Processors (i3-1115G4)
Audio	
Audio Codec	Realtek ALC897 co-lay ALC888S
Ethernet	
LAN Chipset	1 x Intel® I226LM 2.5 Gigabit Ethernet (LAN2) 1 x Intel® I219LM Gigabit Ethernet PHY (LAN1)
Data Rate Per Port	10/100/1000 Base-Tx GbE compatible & 2.5 Gigabit Ethernet
Power Requirement	
Voltage Input Spec.	+24Vdc
ACPI	Single power ATX Support S0,S3, S4, S5 ACPI 5.0 Compliant
Power Mode	AT/ATX (ATX is default setting)
Voltage Input Connector	1 x 4P Mini Din Jack (Edge) 1 x 2P Terminal Black (cable)
Software Support	
OS	Win10, Win11, Linux
Certification	
Certification Information	CE/FCC Class B/3C
Mechanical & Environmental	
Operating Temp.	Operating Temp. 0°C ~ 50°C (w/SSD) ambient w/ 0.5 air flow
Storage Temp.	-30 ~ 70C° (-22°F ~ 158°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing
Dimension (W x L x H)	1800mm x 182mm x 82.2 mm (Standard)
Weight	4.7 Kg
IP Rating	IP50
Mounting Kit	Wall mount kit (optional) DIN RAIL (optional)

BMX-T528

Mini-ITX Desktop System w/ Intel® Tiger Lake

Mechanical Drawing



Ordering Information

P/N	Processor	Memory	Storage	Resolution	Adapter	I/O Ports (COM/USB/LAN)	Display Output	Power Input	Working Temp.	OS Support
BMX-T528-7G7-B1C	i7-1165G7	2 SODIMM	1 M.2 2280/3042/3052 1 SATA3	1920x1080	ATX 120W	6/4/2	DP	+24V DC in	0°C ~ 50°C	Windows 10/11 Linux
BMX-T528-5G7-B1C	i5-1135G7	2 SODIMM	1 M.2 2280/3042/3052 1 SATA3	1920x1080	ATX 120W	6/4/2	DP	+24V DC in	0°C ~ 50°C	Windows 10/11 Linux

I/O Overview

