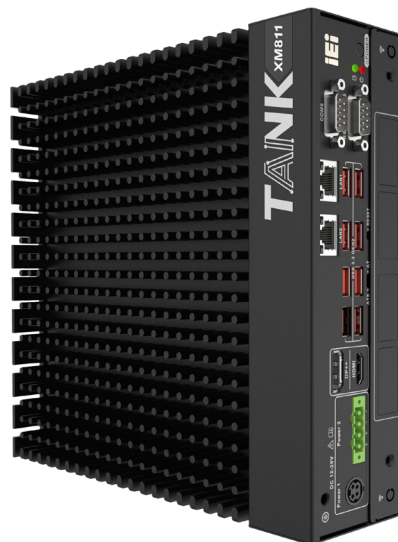


TANK-XM811-D5

- High-Performance 12th/13th/14th Generation Intel® Core™ Processor
- Fanless Embedded Computer

Features

- Supported CPUs:
12th/13th/14th Generation Intel® Core™ Processor
Intel® Core™ processors (Series 2) (Bartlett Lake-S)
- 2 x 2.5G Ethernet ports
- Multiple USB ports and serial ports
- Multiple internal expansion boards for flexible selection
- Various optional backplanes and chassis
- CE/FCC compliant

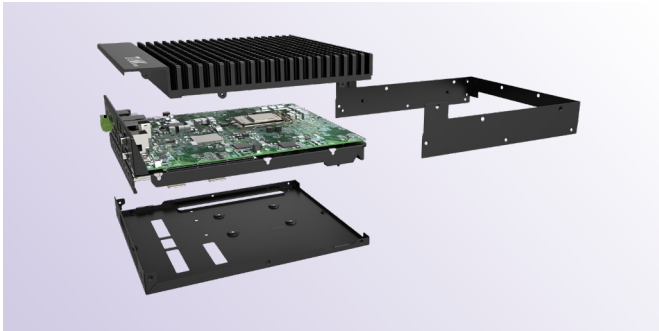


Specifications

Model Name		TANK-XM811-D5
Chassis	Color	Black C
	Dimensions (WxDxH) (mm)	230.6 x 256.04 x 76.2
	System Fan	Fanless
	Chassis Construction	Extruded aluminum alloys
Motherboard	CPU	12th/13th/14th Generation Intel® Core™ Processor Intel® Core™ processors (Series 2) (Bartlett Lake-S)
	Chipset	R680E
	Memory	2 x SO-DIMM DDR5 4800/5600 MT/s (Actual memory frequency depends on the CPU SKU)
Storage	HDD Bay	2 x 2.5" SATA 6Gb/s HDD/SSD bay (RAID 0/1 supported)
I/O Interfaces	Ethernet	1 x 2.5 GbE by Intel® I226LM controller 1 x 2.5 GbE by Intel® I226-V controller
	USB 3.2 Gen 2 (10Gb/s)	8
	COM	2 x RS-232/422/485, 4 x RS-232
	Digital I/O	12-bit (6-in/6-out) DB15
	Audio	1 x MIC in, 1 x Line out
	Display Interface	1 x DP++, 1 x HDMI™
TPM	TPM2.0	Intel® PTT (Firmware TPM 2.0) Optional TPM module via 20-pin header (IEI TPM module P/N:TPM-IN03)
Internal Expansions	M.2	1 x 2280 M-key (PCIe Gen4 x4) 1 x 2230 E-key (USB2.0 + PCIe Gen3 x1, supports vPRO)
	Expansion Backplane	Optional
Power	Power Input	12 ~ 28V DC
	Remote Power Switch	1 x 2-pin
	Power Consumption	Maximum: 24V @ 4.92A (Intel® Core™ 7 Processor 251TE with 32GB memory) Typical: 24V @ 2.08A (Intel® Core™ 7 Processor 251TE with 32GB memory)
Reliability	Mounting	Wall mount
	Operating Temperature	-20°C ~ 60°C with air flow (CPU TDP35W &SSD) -20°C ~ 50°C with air flow (CPU TDP65W &SSD), 10% ~ 95% non-condensing
	Storage Temperature	-40°C ~ 85°C, 10% ~ 95%, non-condensing
	Operating Shock	IEC 60068-2-27 half-sine, 5G, 11ms, 100 shocks with SSD
	Operating Vibration	MIL-STD-810H 514.8C-I with SSD
	Weight (Net/Gross)	3.33/3.7 kg
	Safety / EMC	CE, FCC
	Watchdog Timer	Programmable 1 ~ 255 sec/min
OS	Supported OS	Windows® 10/11 IoT Enterprise/ Linux

Modular Design, Easy to Install

The mainboard is secured to the support bracket to prevent PCB from bending or warping. The three-layer structure consisting of heat spreader, mainboard and baseboard makes it easier to install CPU, memory and HDD, compared with the former TANK series.



Support High-performance Graphics

With IEI power board, it can support 3060 and other advanced graphics cards.

Maximum length of graphics card supported: 350mm

*Specified power adapter is required.

NVIDIA 3060

*Support advanced graphics card



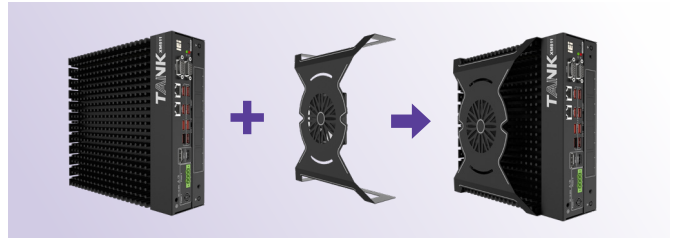
Flexible Expansion

Different expansion requirements can be met. Dual-slot and four-slot SKUs are provided for selection. Customers can choose the type of expansion slot according to their needs.



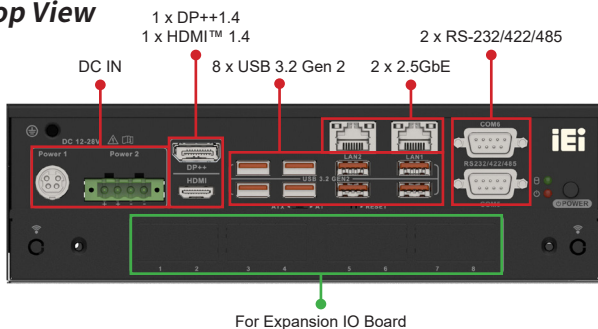
External Fan

Installing an external fan helps to increase system performance in harsh environment.

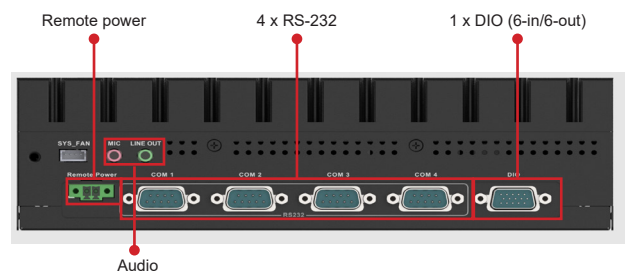


Fully Integrated I/O

Top View

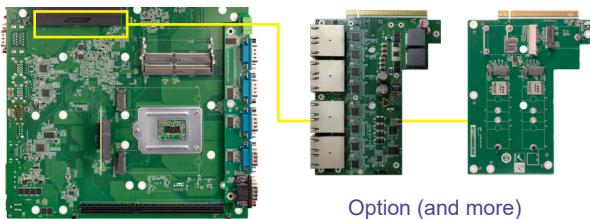


Front View



Modular Board Design

It supports various optional modules, such as M.2 expansion card, 8-port PoE expansion card, etc.



Option (and more)

Expansion IO Board

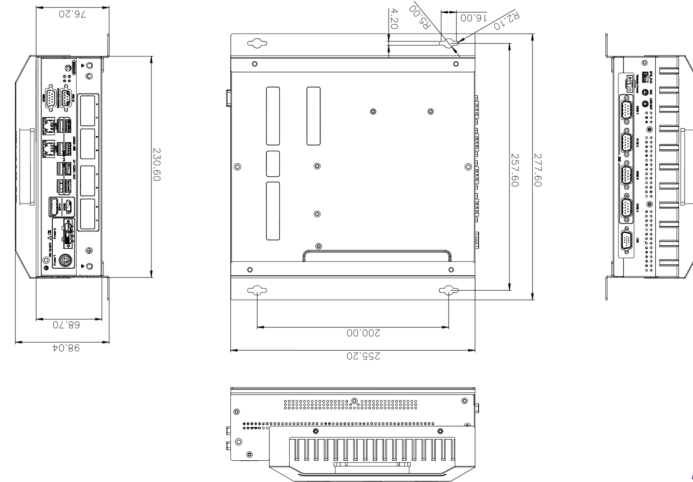
GPOE-XM81-8P	I/O expansion module for TANK 81 series, 8 x 2.5G LAN with PoE
TXIOB-XM81-A	I/O expansion module for TANK 81 series, 2 x M.2 B Key, 1 x M.2 A Key, 1 x PCIe Mini

Support 35W & 65W CPU

Operating temperature:

With 35w CPU (or 45W/65W CPU PL1 & PL2, default 35W):	-20°C ~ 60°C
With 65w CPU:	-20°C ~ 50°C

Dimensions (Unit: mm)



TANK-XM811-D5

Ordering Information

Model	Description
TANK-XM811-D5-I5AC-R10	Ruggedized Fanless Embedded System With Intel® i5-12500TE, 8GB DDR5 RAM, 1xHDMI, 1xDP++, 2x2.5GbE Lan, 2xRS232/422/485, 4xRS232, 8xUSB3.2, 12xGPIO, 12~28V DC and RoHS
TANK-XM811-D5-I7AC-R10	Ruggedized Fanless Embedded System With Intel® i7-12700TE, 8GB DDR5 RAM, 1xHDMI, 1xDP++, 2x2.5GbE Lan, 2xRS232/422/485, 4xRS232, 8xUSB3.2, 12xGPIO, 12~28V DC and RoHS
TANK-XM811-D5-I9AD-R10	Ruggedized Fanless Embedded System With Intel® i9-12900TE, 16GB DDR5 RAM, 1xHDMI, 1xDP++, 2x2.5GbE Lan, 2xRS232/422/485, 4xRS232, 8xUSB3.2, 12xGPIO, 12~28V DC and RoHS
TANK-XM811-D5-C9AD-R10	Ruggedized Fanless Embedded System With Intel® Core™ 9 273PTE, 16GB DDR5 RAM, 1xHDMI, 1xDP++, 2x2.5GbE Lan, 2xRS232/422/485, 4xRS232, 8xUSB3.2, 12xGPIO, 12~28V DC and RoHS
TANK-XM811-D5-C7AD-R10	Ruggedized Fanless Embedded System With Intel® Core™ 7 253PTE, 16GB DDR5 RAM, 1xHDMI, 1xDP++, 2x2.5GbE Lan, 2xRS232/422/485, 4xRS232, 8xUSB3.2, 12xGPIO, 12~28V DC and RoHS
TANK-XM811-D5-C5AD-R10	Ruggedized Fanless Embedded System With Intel® Core™ 5 223PTE, 16GB DDR5 RAM, 1xHDMI, 1xDP++, 2x2.5GbE Lan, 2xRS232/422/485, 4xRS232, 8xUSB3.2, 12xGPIO, 12~28V DC and RoHS

Options

Part No.	Description
EMB-WIFI-KIT02I3-R10	2T2R M.2 wifi module kit for embedded system, IEEE802.11a/b/g/n/ac/ax, 1 x M.2 AE Key Wireless LAN & Bluetooth 5.2; Intel; AX210.NG.WG Module, 2 x RF cable, 2 x Antenna; RoHS
63040-010180-200-RS	Adapter Power; FSP; FSP180-ABAN3; 9NA1804008; Active PFC; Vin: 90~264VAC; 180W; Dim: 75.6*151.3*25.4mm; Plug: 6.5mm; Cable: 1500mm; Erp(NO LOAD 0.5W); Vout: 19VDC; Din 4Pin/lock; CCL; RoHS
32702-003600-100-RS	POWER CORD; EUROPEAN CODE(VDE); 1000mm; (A) PLUG: LT-322(16A 250V); (B) CONNECTOR: LT-501(10A 250V)
SF-TANK-XM81-R10	External fan for TANK-XM81 Series
TPM-IN03-R10	20-pin Infineon SPI TPM2.0 module, software management tool

Optional Expansion Backplane

Part No.	Description
TXCBP-XM81-2A-R10	Expansion backplane module for TANK 81 Series, 2 slot, 1 x PCIe x16 & 1 x PCIe x4
TXCBP-XM81-2B-R10	Expansion backplane module for TANK 81 Series, 2 slot, 2 x PCIe x8
TXCBP-XM81-4A-R11	Expansion backplane module for TANK 81 Series, 4 slot, 1 x PCIe x16 & 2 x PCIe x4 & 1 x PCIe x1 w/ external power supply
TXCBP-XM81-4B-R11	Expansion backplane module for TANK 81 Series, 4 slot, 2 x PCIe x8 & 2 x PCIe x4 w/ external power supply
TXCBP-XM81-4C-R10	Expansion backplane module for TANK 81 Series, 4 slot, 1 x PCIe x16 & 2 x PCIe x4 & 1 x PCIe x4
TXCBP-XM81-G2-PW-R11	Expansion backplane module for TANK 81 Series, 6 slot, 2 x PCIe x8 & 2 x PCIe x4 w/ external power supply
IDD-X1228150-R10 ¹	Extended Power Board for TANK-XM81 Series, 150W@16~28V or 380W@12V DC input 12V output Power Module

¹ For expansion cards (graphics cards, accelerator cards) that require independent power supply to provide independent power supply, it must be equipped with a Backplane with W/external power supply function.

Optional Expansion Chassis

Part No.	Description
TXC-XM81-3S-R10	3-slot expansion chassis for TANK 81 Series
TXC-XM81-4S-R10	4-slot expansion chassis for TANK 81 Series
TXC-XM81-G1-R10	One GPU expansion chassis for TANK 81 Series
TXC-XM81-G2-R10	Dual GPU expansion chassis for TANK 81 Series

Optional Internal Expansion Boards

Part No.	Description
GPOE-XM81-8P-R11	I/O expansion module for TANK 81 Series, 8 x 2.5G LAN with PoE
TXIOB-XM81-A-R10	I/O expansion module for TANK 81 Series, 2 x M.2 B Key, 1 x M.2 A Key, 1 x PCIe Mini

Packing List

1 x Screw pack	2 x Terminal block	1 x Mounting bracket	1 x SATA cable
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