

# TANK-XM81 Series Expansion Products

The TANK-XM81 series allows you to add various functionality through internal IO expansion boards and external expansion slots.

The internal IO expansions can support up to 8 PCIe x1 and 5 USB 2.0, and is compatible with various combinations, for example, multiple network cards and M.2 B key modules.

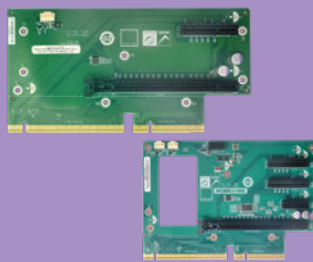
The external expansions provide multiple PCIe slot options, including PCIe x16, PCIe x4 and PCIe x1, giving users more flexibility for solution integration.

Note: For different expanded functions, PCIe assignments need to be paired with different BIOS assignments. Please contact IEI for details.

## Comprehensive Expansion Options for Various Requirements



**Embedded Box**








**Backplane**





**Chassis**

# Selection Guide



Chassis Name	TXC-XM81-3S		TXC-XM81-4S		
Backplane Name	TXCBP-XM81-2A 	TXCBP-XM81-2B 	TXCBP-XM81-4A 	TXCBP-XM81-4B 	TXCBP-XM81-4C 
Slot 1	PCIe x16	PCIe x16 (PCIe x8 Signal)	PCIe x16	PCIe x16 (PCIe x8 Signal)	PCIe x16
Slot 2	N/A	N/A	PCIe x1	PCIe x4	PCIe x4
Slot 3	PCIe x4	PCIe x16 (PCIe x8 Signal)	PCIe x4	PCIe x16 (PCIe x8 Signal)	PCI
Slot 4	N/A	N/A	PCIe x4	PCIe x4	PCI
System Fan (Chassis)	1 x 5cm (RS5015B12VH, 6000rpm, 35db) 1 x 5cm (Optional)		1 x 8cm (FD1280, 3800rpm, 40db)		
System Fan (Backplane)	1 x 4-pin (1x4)	2 x 4-pin (1x4)	2 x 4-pin (1x4)	2 x 4-pin (1x4)	1 x 4-pin (1x4)
Power Connector (Backplane)	N/A	N/A	1 x 8-pin (2x4)	1 x 8-pin (2x4)	N/A
Max. Length of Add-on Card (mm)	223.18		224.40		
Additional Power Board	N/A		IDD-X1228150 (adds a terminal block on rear I/O)		
Dimension (W x H x D) (mm)	230.6 x 69.16 x 255		230.6 x 100 x 255		
With Host Dimension (W x H x D) (mm)	230.6 x 137.86 x 255		230.6 x 168.5 x 255		



Chassis Name	TXC-XM81-G1	TXC-XM81-G2
Backplane Name	TXCBP-XM81-4A 	TXCBP-XM81-G2 
Slot 1	PCIe x16	PCIe x16 (PCIe x8 Signal)
Slot 2	PCIe x1	N/A
Slot 3	PCIe x4	PCIe x16 (PCIe x8 Signal)
Slot 4	PCIe x4	N/A
Slot 5	N/A	PCIe x4
Slot 6	N/A	PCIe x4
System Fan (Chassis)	1 x 8cm (FD1280, 3800rpm, 40db)	
System Fan (Backplane)	2 x 4-pin (1x4)	2 x 4-pin (1x4)
Power Connector (Backplane)	1 x 8-pin (2x4)	1 x 8-pin (2x4)
Max. Length of Add-on Card (mm)	339.8	
Additional Power Board	IDD-X1228150 (adds a terminal block on rear I/O)	
Dimension (W x H x D) (mm)	230.6 x 166.3 x 370.4	230.6 x 207.1 x 370.4
With Host Dimension (W x H x D) (mm)	230.6 x 168.7 x 370.4	230.6 x 209.86 x 370.4

# TXIOB-XM81-A

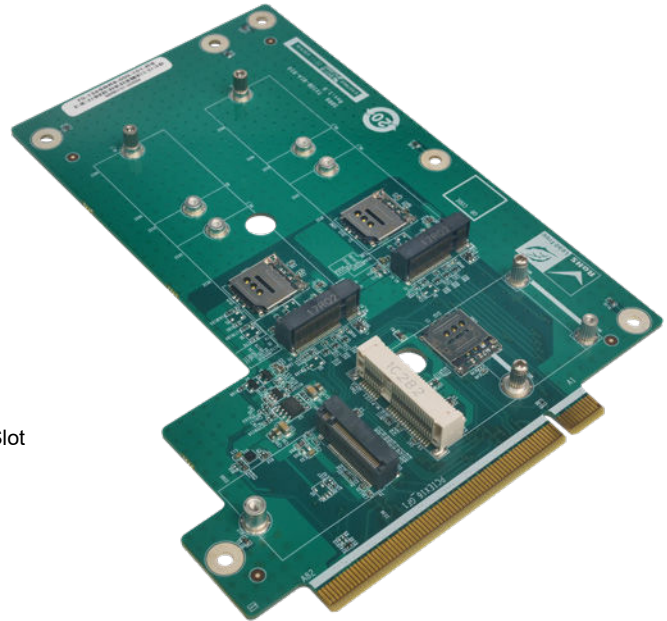
## Expansion IO Board Module

### Features

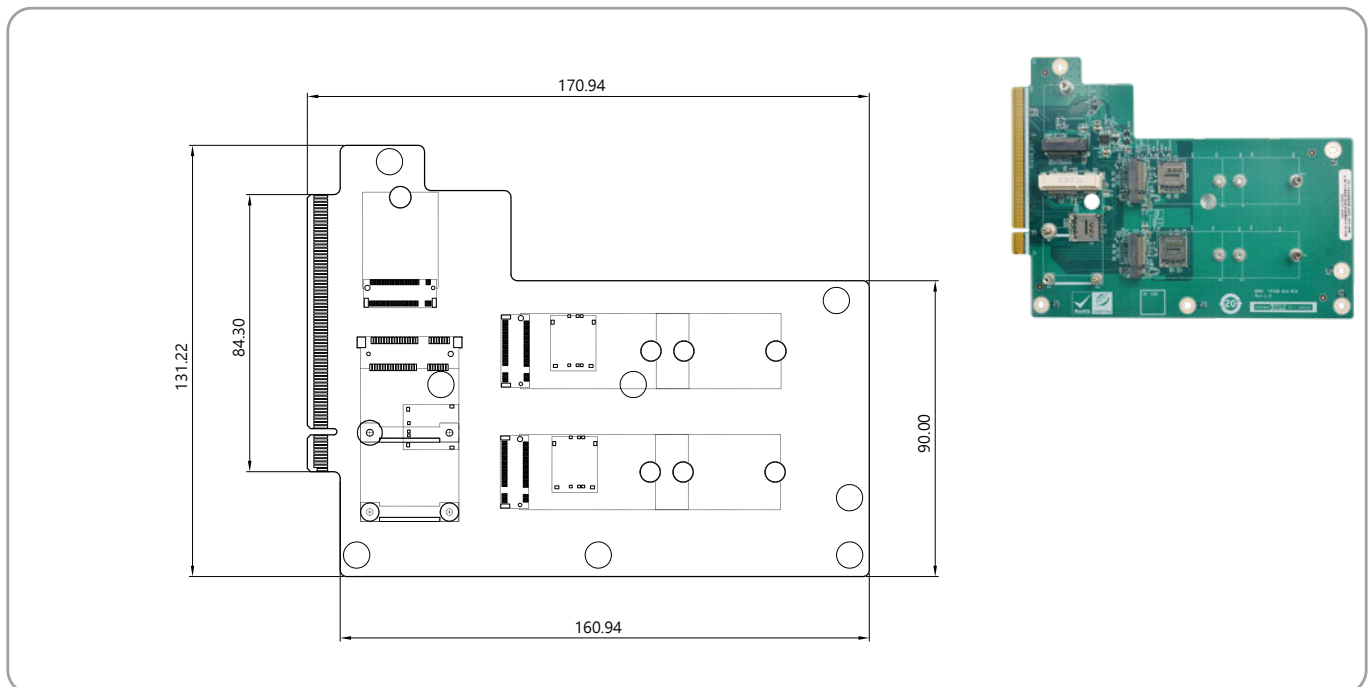
- Support Full-Size PCIe Mini
- Support M.2 A Key 2230
- Support M.2 B Key 3042/52/80 with SIM Slot

### Specifications

- External Connector:
  - 1 x Full-Size Mini PCIe (PCIe x1 & USB2.0) with SIM Slot
  - 1 x M.2 A Key 2230 (PCIe x1 & USB2.0)
  - 1 x M.2 B Key (M.2\_B1) 3042/52/80 (PCIe x1 & USB3.2<sup>1</sup>) with SIM Slot
  - 1 x M.2 B Key (M.2\_B2) 3042/52/80 (PCIe x2<sup>2</sup>) with SIM Slot
- Operating Temperature: 0°C ~ 60°C
- Operating Humidity: 5% ~ 95%, non-condensing
- Dimensions (LxW): 131.22 mm x 170.94 mm
- CE/FCC compliant



### Dimensions (Unit: mm)



### Ordering Information

Model	Description
TXIOB-XM81-A-R10	TANK-XM81 series expansion IO board module, 2 x M.2 B Key, 1 x M.2 A Key, 1 x PCIe Mini

Note: 1. The USB 3.2 signal of the M.2\_B1 connector is not supported in the TANK-XM810.

2. The default signal of the M.2\_B2 connector is PCIe x1. To configure as PCIe x2, please consult with IEI.

### Packing List

1 x Screw pack

# GPOE-XM81-8P

## 8-Port PoE LAN Card

### Features

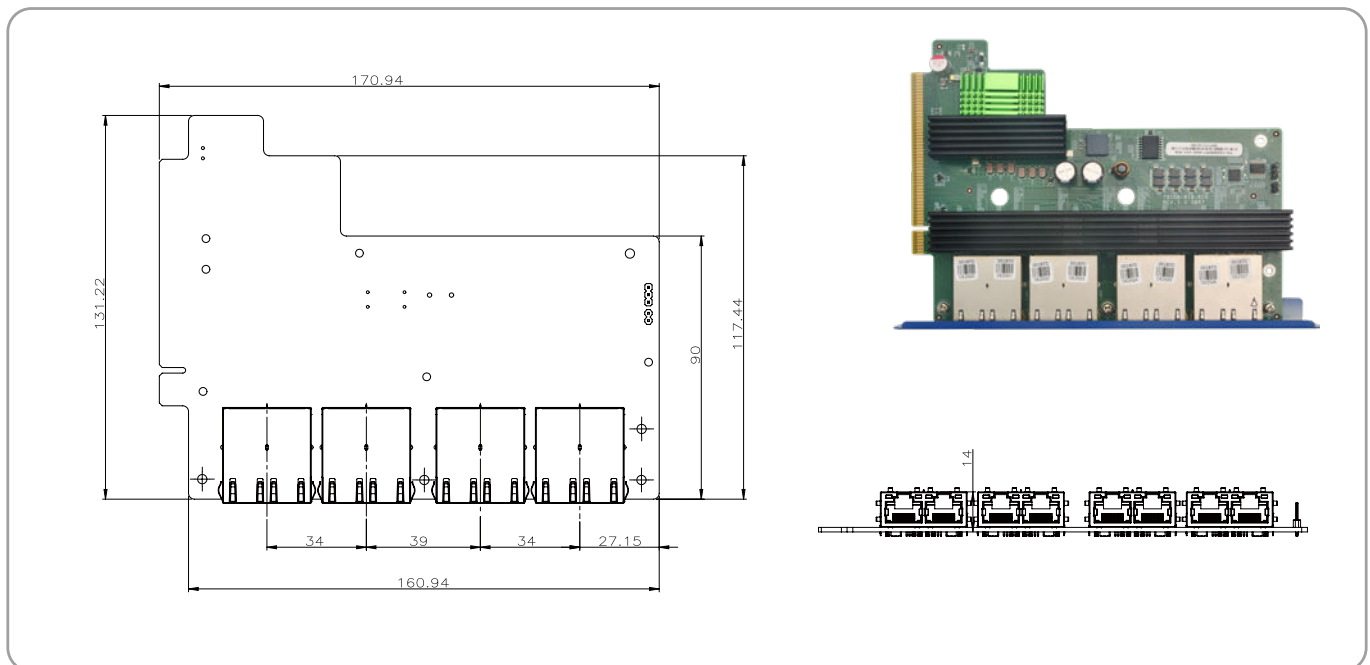
- Support IEEE 802.3at for PoE (Power over Ethernet) with 30 watts per port
- Support link aggregation/jumbo frames (9 Kbyte)

### Specifications

- Interface: 8 x PCI Express® x1
- Ethernet: 8 x Intel® I225-V controller
- PoE Capability
- IEEE 802.3at with 30W / 52V per port (Total power 60W)
- Operating Temperature: 0°C ~ 60°C
- Operating Humidity: 5% ~ 95%, non-condensing
- CE/FCC compliant



### Dimensions (Unit: mm)



### Ordering Information

Model	Description
GPOE-XM81-8P-R10	TANK-XM81 series expansion IO board module, 8 x 2.5G LAN with PoE
TXIOB-XM81-8P2-R10	TANK-XM81 series expansion IO board module, 8 x 2.5G LAN

### Packing List

1 x Screw pack

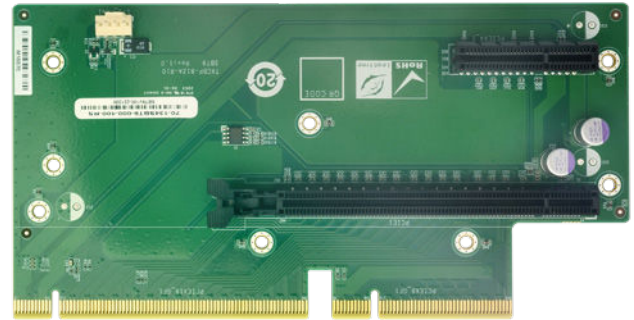
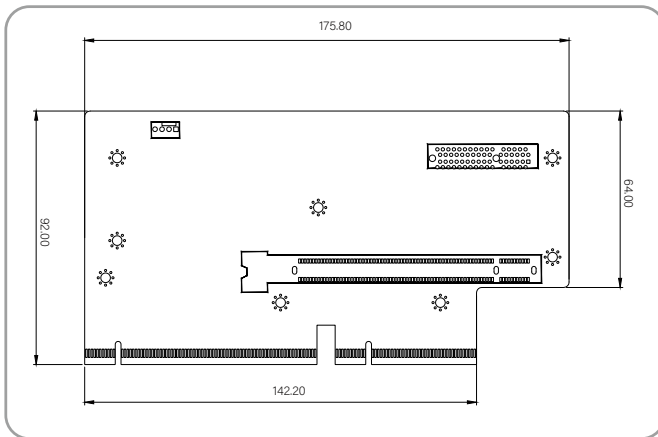
# TXCBP-XM81-2A

2-Slot Backplane

## Specifications

- 2-slot backplane for TANK-XM81 series expansion chassis
- One PCIe x16 & one PCIe x4 slot
- One system fan connector
- Compatible chassis: TXC-XM81-3S

## Dimensions (Unit: mm)



## Ordering Information

Model	Description
TXCBP-XM81-2A-R10	TANK-XM81 series expansion backplane module, 2-slot, one PCIe x16 & one PCIe x4
TXC-XM81-3S-R10	TANK-XM81 series 3-slot expansion chassis

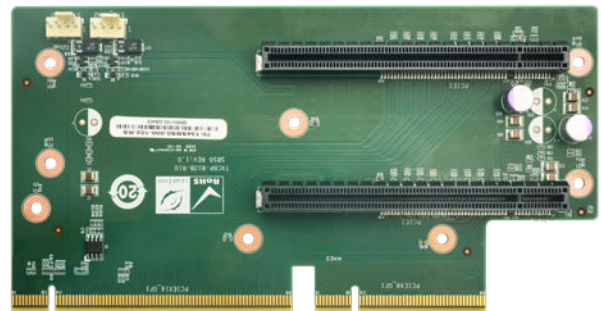
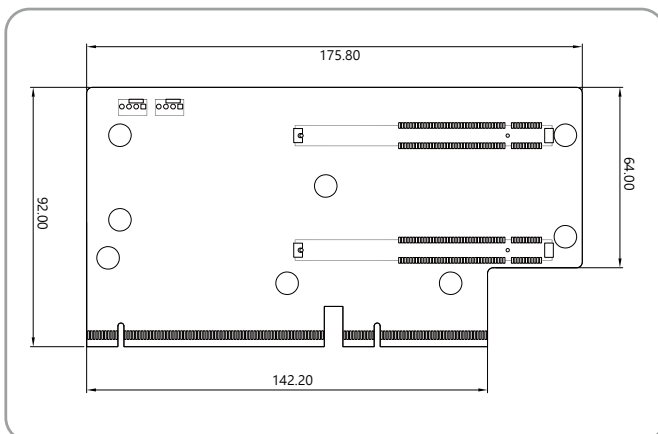
# TXCBP-XM81-2B

2-Slot Backplane

## Specifications

- 2-slot backplane for TANK-XM81 series expansion chassis
- Two PCIe x16 (PCIe x8 signal)
- Two system fan connectors
- Compatible chassis: TXC-XM81-3S

## Dimensions (Unit: mm)



## Ordering Information

Model	Description
TXCBP-XM81-2B-R10	TANK-XM81 series expansion backplane module, 2-slot, two PCIe x8
TXC-XM81-3S-R10	TANK-XM81 series 3-slot expansion chassis

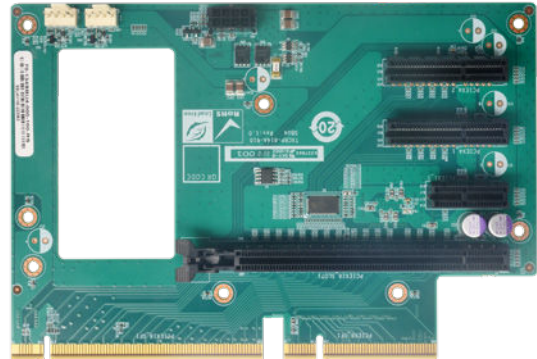
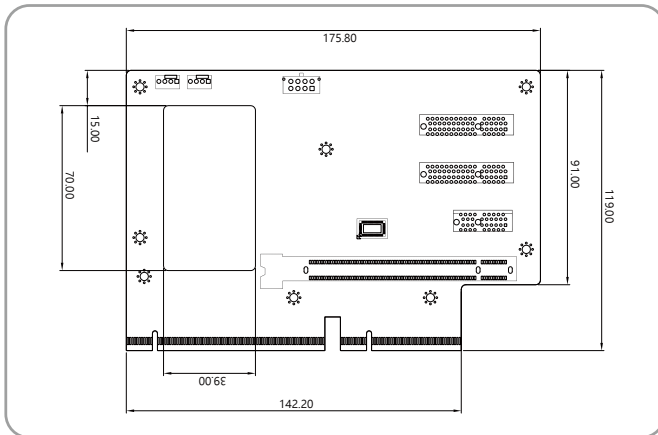
# TXCBP-XM81-4A

## 4-Slot Backplane

### Specifications

- 4-slot backplane for TANK-XM81 series expansion chassis
- One PCIe x16 & one PCIe x1 & two PCIe x4 slot
- Two system fan connectors
- Compatible chassis: TXC-XM81-4S/TXC-XM81-G1
- Support an additional power supply board

### Dimensions (Unit: mm)



### Ordering Information

Model	Description
TXCBP-XM81-4A-R10	TANK-XM81 series expansion backplane module, 4-slot, one PCIe x16, two PCIe x4, one PCIe x1, w/ power connector
TXC-XM81-4S-R10	TANK-XM81 series 4-slot expansion chassis
IDD-X1228150-R10	150W@16~28V or 380W@12V DC input 12V output power module
TXC-XM81-G1-R10	TANK-XM81 series single GPU expansion chassis

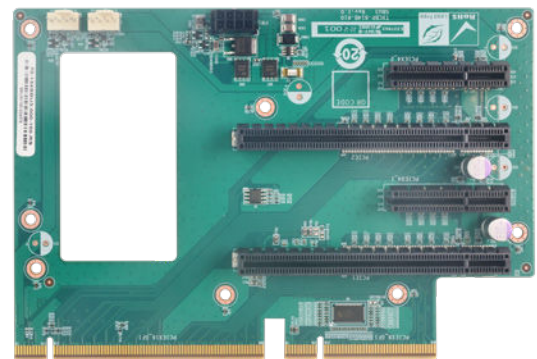
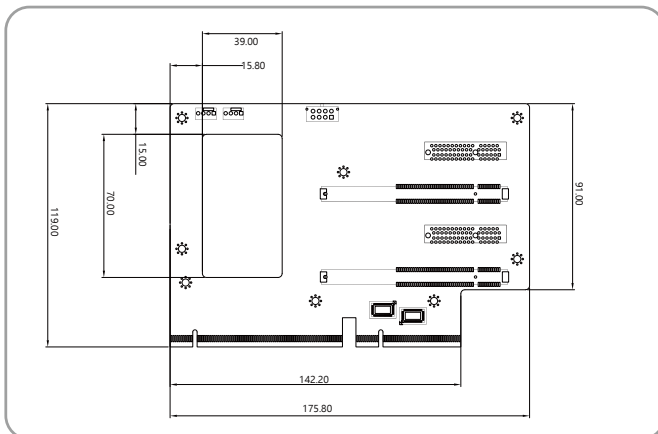
# TXCBP-XM81-4B

## 4-Slot Backplane

### Specifications

- 4-slot backplane for TANK-XM81 series expansion chassis
- Two PCIe x16 (PCIe x8 signal) & two PCIe x4 slot
- Two system fan connectors
- Compatible chassis: TXC-XM81-4S
- Support an additional power supply board

### Dimensions (Unit: mm)



### Ordering Information

Model	Description
TXCBP-XM81-4B-R10	TANK-XM81 series expansion backplane module, 4-slot, two PCIe x8 & two PCIe x4, w/ power connector
TXC-XM81-4S-R10	TANK-XM81 series 4-slot expansion chassis
IDD-X1228150-R10	150W@16~28V or 380W@12V DC input 12V output power module

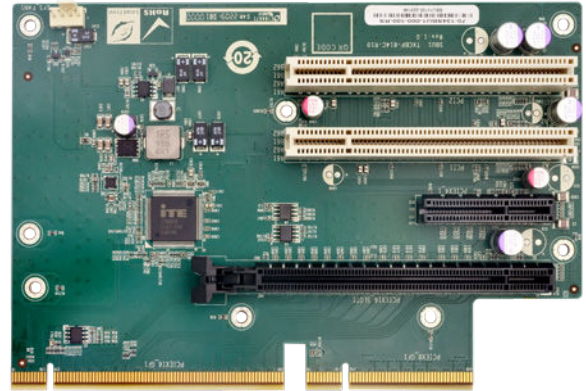
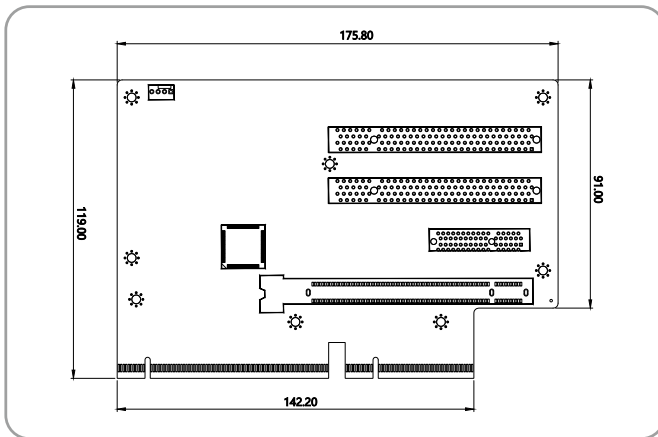
# TXCBP-XM81-4C

## 4-Slot Backplane

### Specifications

- 4-slot backplane for TANK-XM81 series expansion chassis
- One PCIe x16 & one PCIe x4 & two PCI Slot
- One system fan connector
- Compactible chassis: TXC-XM81-4S

### Dimensions (Unit: mm)



### Ordering Information

Model	Description
TXCBP-XM81-4C-R10	TANK-XM81 series expansion backplane module, 2-slot, one PCIe x16 & one PCIe x4 & two PCI
TXC-XM81-4S-R10	TANK-XM81 series 4-slot expansion chassis

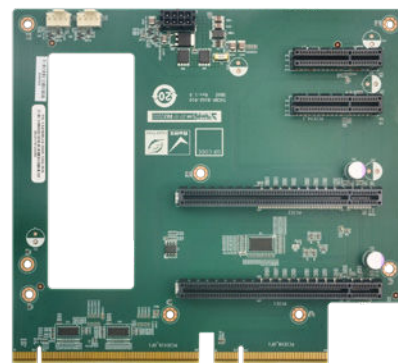
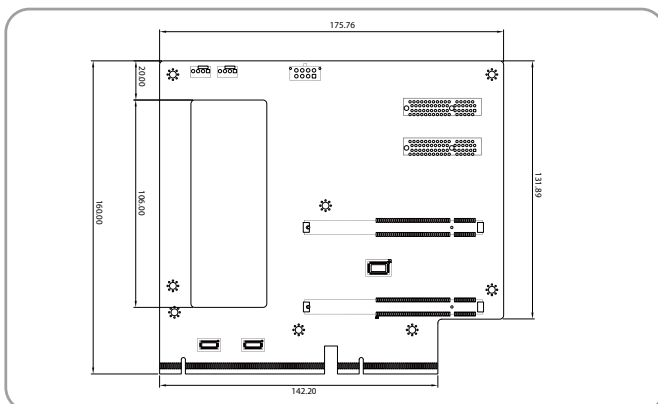
# TXCBP-XM81-G2

## 4-Slot Backplane

### Specifications

- 4-slot backplane for TANK-XM81 series expansion chassis
- Two PCIe x16 ( PCIe x8 signal ) & two PCIe x4 slots
- Two system fan connectors
- Compatible chassis: TXC-XM81-G2
- Support an additional power supply board

### Dimensions (Unit: mm)



### Ordering Information

Model	Description
TXCBP-XM81-G2-PW-R10*	TANK-XM81 series expansion backplane module, 6-slot, two PCIe x8 & two PCIe x4, w/ power connector
TXC-XM81-G2-R10	TANK-XM81 series dual GPU expansion chassis
IDD-X1228150-R10	150W@16~28V or 380W@12V DC input 12V output power module

\*Based on project discussion, it might have MOQ criteria. Please contact with Sales Account.

# IDD-X1228150

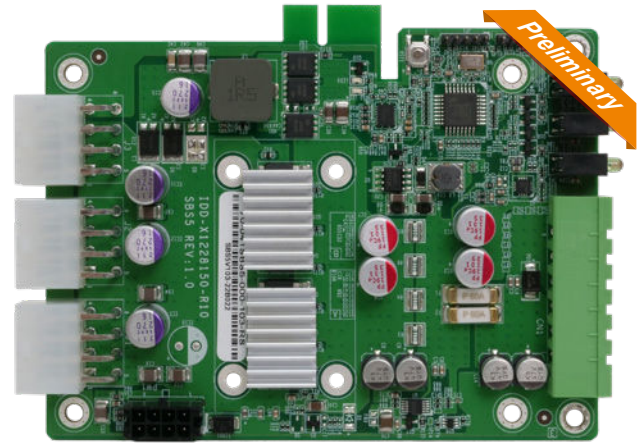
150W/380W Power Module

## Features

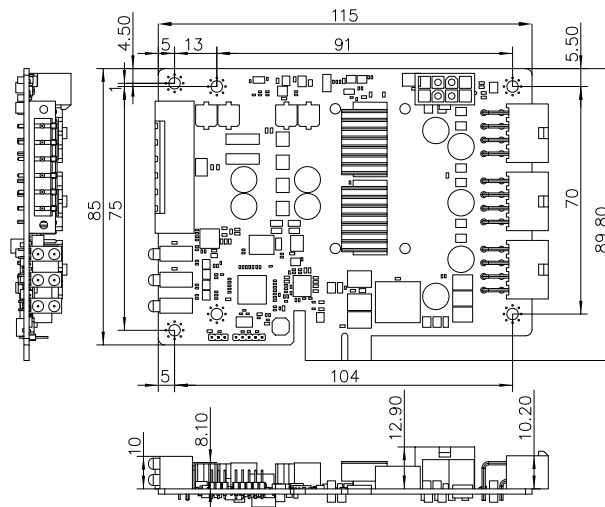
- 150W (16-28V) /380W (12V ONLY) output
- 12V&16-28V input
- Up to 95% efficiency
- RoHS compliant

## Specifications

- Input:12V & 16-28V DC
- Output (max):12V@32A (12V input) or 12V@12.5A (16-28V input)
- Performance characteristics  
 Noise & ripple: <25 mV  
 Load regulation: <120 mV  
 Efficiency: Up to 95%
- Dimensions (mm): 89.8 x 135
- Operating temperature: 0°C ~ 70°C



## Dimensions (Unit: mm)



## Ordering Information

Model	Description
IDD-X1228150-R10	150W@16~28V or 380W@12V DC input 12V output power module
32110-000200-100-RS	Wire cable; 3;300mm

## Packing List

1 x Power cable for BP	1 x Power cable for graphics card
1 x IO blank	1 x Screw pack
1 x Terminal block	



# SF-TANK-XM81

## Expansion Fan Module

The expansion fan module conforming to the design of the TANK-X81 series can be easily installed on the top of the aluminum extrusion, allowing the heat on the surface to be air-cooled and dissipated by fan.

### Specifications

Model Name	SF-TANK-XM81
Description	Expansion fan module
Material	Heavy duty metal
Color	Black
Fan Dimensions (mm)	80 x 80 x 15
Bearing Type	Two ball bearing
Fan Speed (RPM)	3800
Noise Level (dBA)	40
Air Flow (CFM)	35.77
Life Expectancy (hrs)	6500

### Ordering Information

Model	Description
SF-TANK-XM81-R10	External fan for TANK-XM81 Series



# TXC-XM81-3S

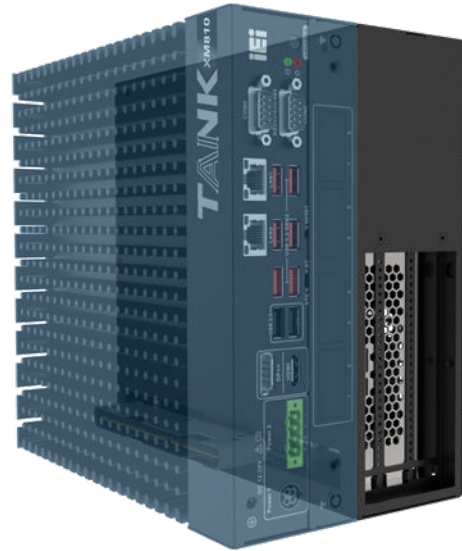
## 3-slot Expansion Chassis

### Features

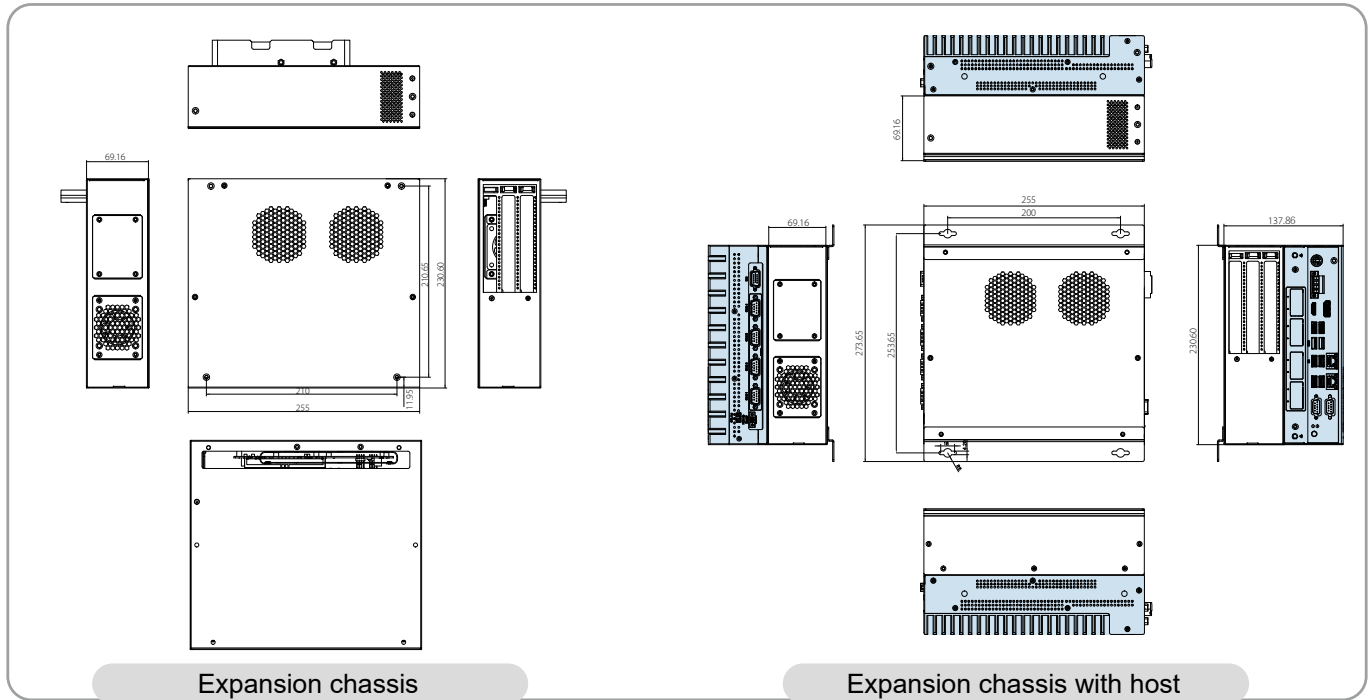
- 3-slot half-size chassis
- One 5cm cooling fan
- TANK-XM81 series compatible
- Maximum 75W for add-on card power

### Specifications

Model Name	TXC-XM81-3S
Description	Heavy duty metal
Expansion Slots	3 slots
Cooling Fans	1 x 5cm (6000rpm, 35db)
Color	Black
Maximum Length of Expansion Card	223mm
Dimensions (DxWxH) (mm)	230.6 x 69.16 x 255 230.6 x 137.86 x 255 (with TANK-XM810)



### Dimensions (Unit: mm)



### Ordering Information

Model	Description
TXC-XM81-3S-R10	TANK-XM81 series 3-slot expansion chassis
TXCBP-XM81-2A-R10	TANK-XM81 series expansion backplane module, 2-slot, one PCIe x16 & one PCIe x4
TXCBP-XM81-2B-R10	TANK-XM81 series expansion backplane module, 2-slot, two PCIe x8
41009-0288C2-00-HF*	Fan filter bracket
31100-000499-RS*	Fan; +12V DC; 4PIN; RUNDA; 50*50*15mm; 6000RPM; two ball bearing; 7.59CFM; 35dB; 70000hur; CE, TUV; CCL ;RoHS
44215-050101-RS*	Fan retention screws

NOTE: 41009-0288C2-00-HF\*, 31100-000499-RS\* and 44215-050101-RS\* need to be used together.

### Packing List

1 x Mounting bracket	1 x Screw pack
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# TXC-XM81-4S

## 4-slot Expansion Chassis

### Features

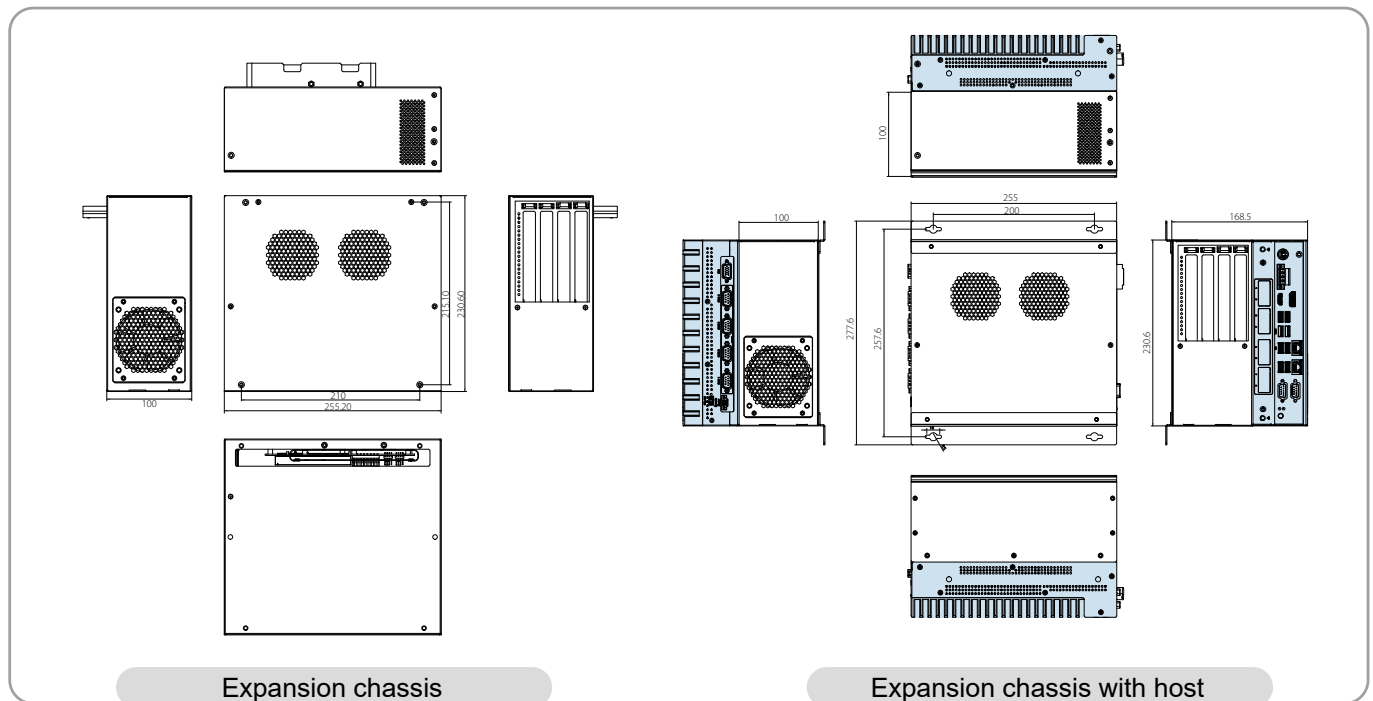
- 4-slot half-size chassis
- One 8cm cooling fan
- TANK-XM81 series compatible
- Maximum 75W for add-on card power
- Support IEI expansion power board, providing up to 380W power to GPU cards

### Specifications

Model Name	TXC-XM81-4S
Construction	Heavy duty metal
Expansion Slots	4 slots
Cooling Fans	1 x 8cm (3800rpm,40db)
Color	Black
Max Length of Expansion Card	224.4mm
Dimensions (DxWxH) (mm)	230.6 x 100 x 255 230.6 x 168.50 x 255 (with TANK-XM810)



### Dimensions (Unit: mm)



### Ordering Information

Model	Description
TXC-XM81-4S-R10	TANK-XM81 series 4-slot expansion chassis
TXCBP-XM81-4A-R10	TANK-XM81 series expansion backplane module, 4-slot, one PCIe x16, two PCIe x4, one PCIe x1
TXCBP-XM81-4B-R10	TANK-XM81 series expansion backplane module, 4-slot, two PCIe x8 & two PCIe x4, w/ power connector
TXCBP-XM81-4C-R10	TANK-XM81 series expansion backplane module, 4-slot, one PCIe x16, two PCI, one PCIe x4
IDD-X1228150-R10	150W@16~28V or 380W@12V DC input 12V output power module

### Packing List

1 x Mounting bracket	1 x Screw pack
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# TXC-XM81-G1

## 4-slot Single GPU Expansion Chassis

### Features

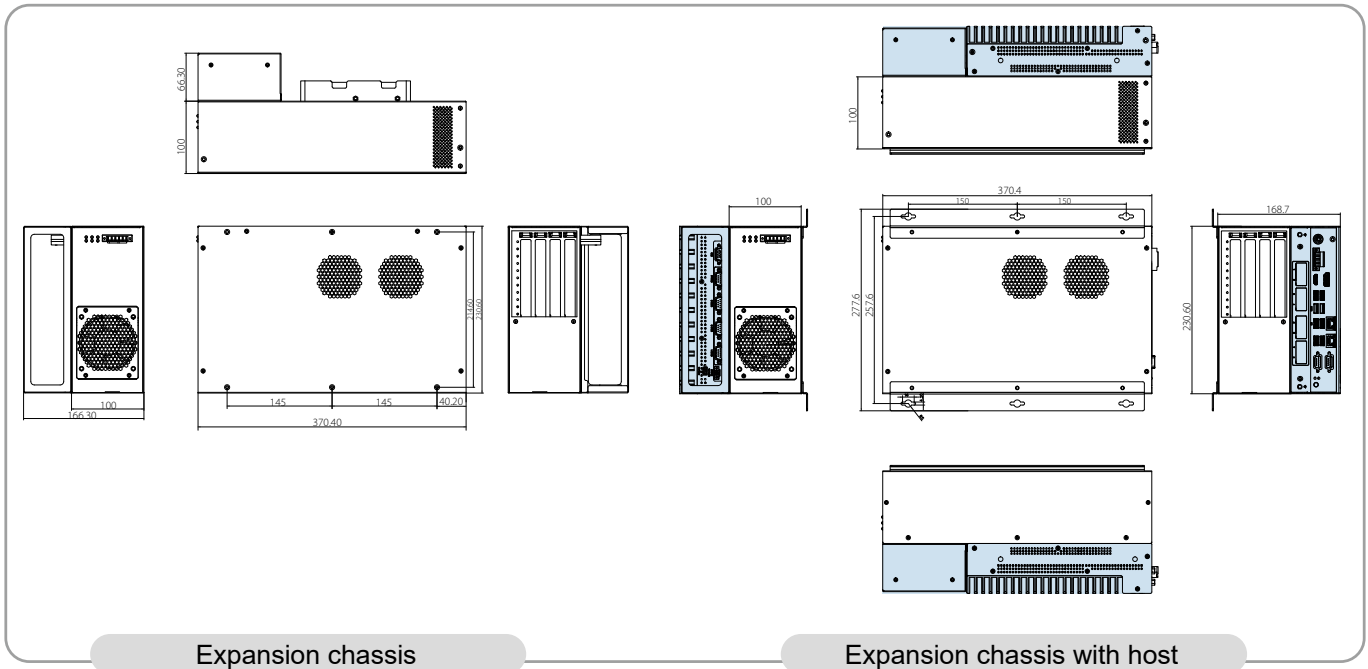
- 4-slot full-size chassis
- One 8cm cooling fan
- TANK-XM81 series compatible
- Maximum 75W for add-on card power
- Support IEI expansion power board, providing up to 380W power to GPU cards

### Specifications

<b>Model Name</b>	<b>TXC-XM81-G1</b>
Construction	Heavy duty metal
Expansion Slots	4 slots
Cooling Fans	1 x 8cm (3800rpm,40db)
Color	Black
Max Length of Expansion Card	339.8mm
Dimensions (DxWxH) (mm)	230.6 x 100 x 370.4 230.6 x 168.70 x 370.4 (with TANK-XM810)



### Dimensions (Unit: mm)



### Ordering Information

Model	Description
TXC-XM81-G1-R10*	TANK-XM81 series single GPU expansion chassis
TXCBP-XM81-4A-R10	TANK-XM81 series expansion backplane module, 4-slot, one PCIe x16 & one PCIe x4, w/ power connector
IDD-X1228150-R10	150W@16~28V or 380W@12V DC input 12V output power module

\*Based on project discussion, it might have MOQ criteria. Please contact with Sales Account.

### Packing List

1 x Mounting bracket	1 x Screw pack
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# TXC-XM81-G2

## 6-slot Dual GPU Expansion Chassis

### Features

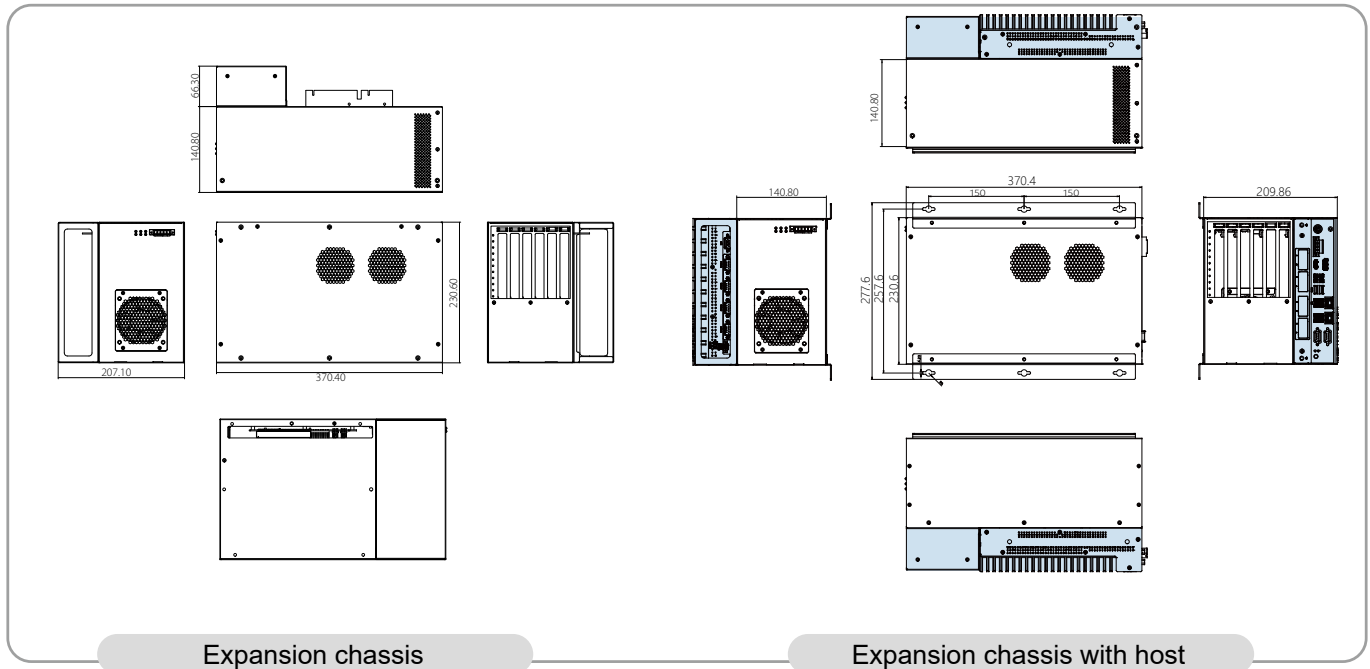
- 6-slot full-size chassis
- One 8cm cooling fan
- TANK-XM81 series compatible
- Maximum 75W for add-on card power
- Support IEI expansion power board, providing up to 380W power to GPU cards

### Specifications

Model Name	TXC-XM81-G2
Construction	Heavy duty metal
Expansion Slots	6 slots
Cooling Fans	1 x 8cm (3800rpm,40db)
Color	Black
Max Length of Expansion Card	339.8mm
Dimensions (DxWxH) (mm)	230.6 x 140.80 x 370.4 230.6 x 209.86 x 370.4 (with TANK-XM810)



### Dimensions (Unit: mm)



### Ordering Information

Model	Description
TXC-XM81-G2-R10*	TANK-XM81 series dual GPU expansion chassis
TXCBP-XM81-G2-PW-R10	TANK-XM81 series expansion backplane module, 6-slot, two PCIe x8 & two PCIe x4, w/ power connector
IDD-X1228150-R10	150W@16~28V or 380W@12V DC input 12V output power module

\*Based on project discussion, it might have MOQ criteria. Please contact with Sales Account.

### Packing List

1 x Mounting bracket	1 x Screw pack
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