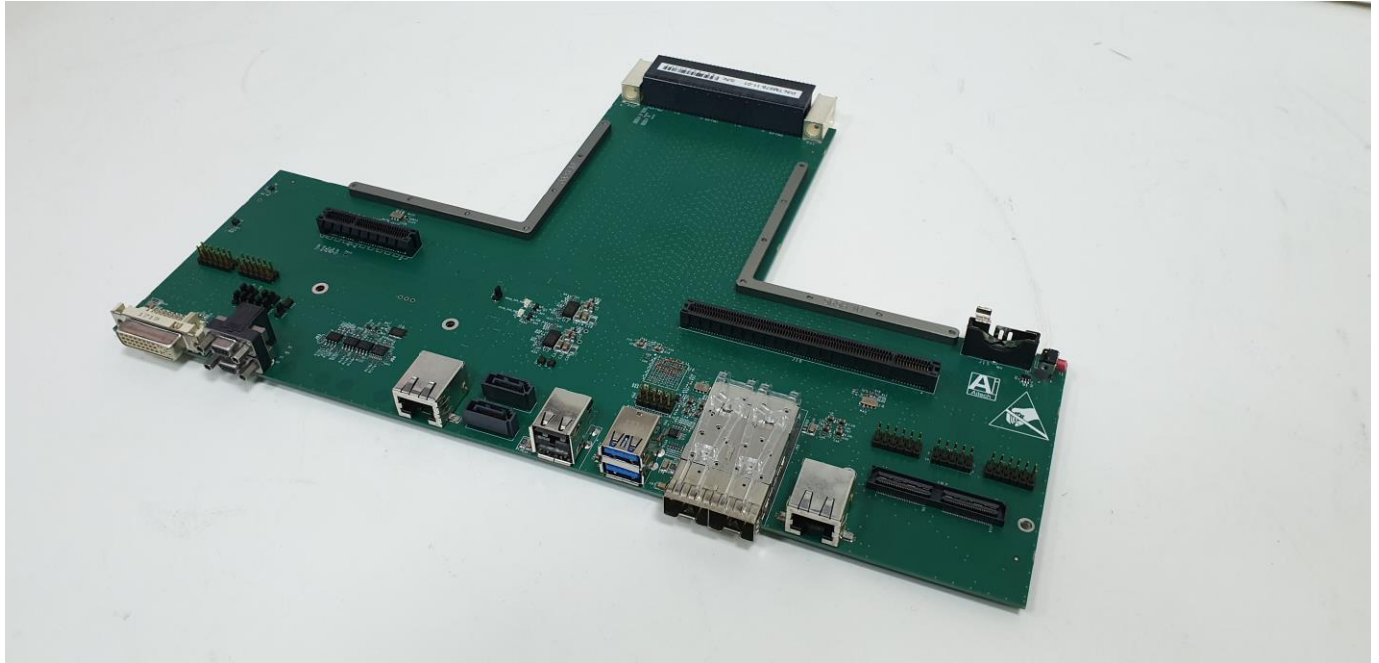# TM878

3U VPX RTM for the C878 SBC

- ■ **3U VPX Rear Transition Module (RTM) for installation in standard ANSI/VITA 46.10 slots**

- ■ **Standard Connectors for C878 I/O Interfaces**

- ■ **High Speed Connector for Xilinx SerDes I/O's**

- ■ **High Speed PCIe x16 Slot for PCIe signals**

- ■ **RTC Backup Battery Receptacle**

- ■ **Reset Pushbutton**

- ■ **80 mm Mounting Depth**

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TM8788

TM878

Overview

Supported Products	C878 3U VPX SBC
I/O Routing	TM878 supports all C878 I/O variants. Signals from backplane pins that differ in function per C878 I/O variant are routed to jumpers on the TM878 PCB, which select the TM878 connector to which the signals are routed.
System Compatibility	Supports both air-cooled and conduction-cooled versions of the C878, when installed in systems that meet the following specifications: • Chassis accommodates rear plug-in units • ANSI/VITA 46.10 compliant backplane with RJ0, RJ1, and RJ2 connectors on the rear side of the C878 slot • Compatible with TM878 specifications listed in the *Mechanical* section below

Supported Interfaces

C878 Interface	TM878 Interface
HDMI Video output	DVI-I Connector (please use standard DVI-to-HDMI passive cable / adapter)
1000Base-T Ports	2 x RJ45 Connectors
1000Base-BX/KX / 10GBase-KR	2 x SFP Connectors (cage only, SFP modules not included)
SATA Ports	2 x SATA Plug Connectors
USB Ports	4 x USB Type A Connectors (1 x USB 3.0/2.0, 3 x USB 2.0)
Serial Ports	2 x 9-Pin Micro D Connectors
Discrete I/O	I/O Header Connector
Custom 10G SerDes Ports from Xilinx UltraScale+ FPGA	120-Pin High Speed Connector (Ports #0 /#1)
VPX SYSRESET# Signal	Reset Push Button
VPX P1_VBAT Signal	Coin Cell Battery Receptacle
IPMI I²C Buses	I/O Header Connector
Tamper Detect Input	I/O Header Connector
PCIe Slot x16	PCIe slot x16 lanes (connected to C878 VPX Data/Expansion Planes interface, can be used only on backplanes with Data/Expansion Plane signals routed to RTM backplane connectors, for example: single-slot backplane)

Mechanical

- 3U VPX form factor
- 80 mm mounting depth
- Can be used in enclosures with mounting depth > 80 mm using an extender (not included)
- Supports installation in standard ANSI/VITA 46.10 RTM slots
- TM878 PCB extends beyond the standard RTM front panel location, with an expanded width in the area that extends outside of the enclosure, allowing the TM878 to be installed in a standard RTM slot while also providing additional room for I/O connectors

Contact your Aitech representative if more information on dimensions or mechanical compatibility is needed
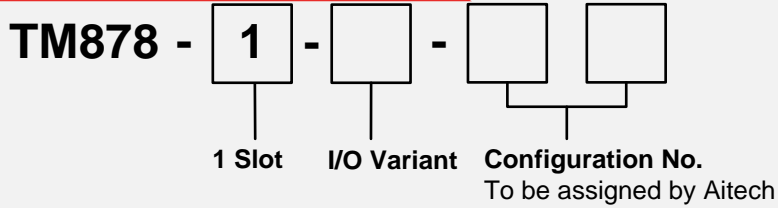
Power

- VPX backplane 12 V and 3.3 V power supplies are routed to the PCIe slot
- If the PCIe slot is not used, only the VPX backplane 3.3 V power supply is required by the TM878, with typical power consumption of 4 W when two SFP modules are used

Ordering Information

TM878 - | 1 | - | | - | | |

1 Slot   **I/O Variant**   **Configuration No.**
To be assigned by Aitech

Example: TM878-11-00

Contact Aitech

Contact your Aitech sales representative for additional product information, and for inquiries regarding customized configurations of the TM878.

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