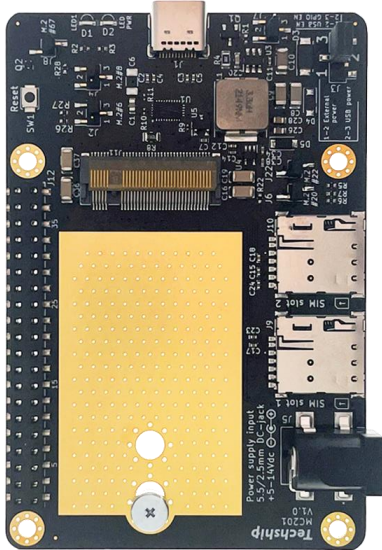


TECHSHIP M.2 KEY B TO USB C ADAPTER SERIES

MC201

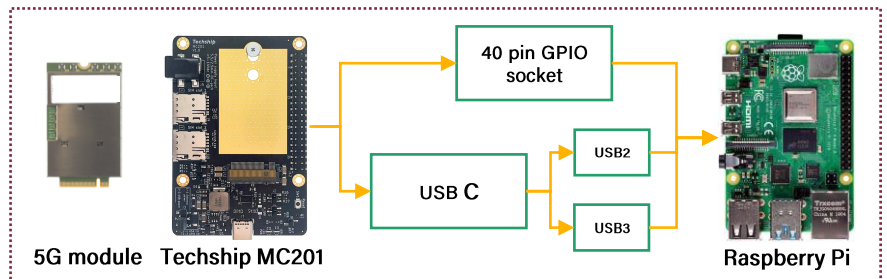
DESCRIPTION



Fast-forward your IoT transition with Techship's MC201 adapter board designed for 5G and 4G mobile broadband cellular data cards.

In-house designed by the Techship engineering team for optimal hardware compatibility with M.2 cellular data cards and with the Raspberry Pi in mind. Locally manufactured in Sweden for high-quality and flexible production.

Seamlessly use 5G and 4G cellular data cards with the modern M.2 form factor in the MC201 adapter board. Developed to electrically and physically fit the Raspberry 4, it works as a cellular extension adapter and the common M.2 signals for cellular cards can be configured via the Raspberry's GPIO pin header.



The MC201 board is also useful as a flexible and cost-effective development kit. It is a handy alternative to your own hardware platform and software environment during the cellular data card integration phase and for your products life-cycle maintenance. The MC201 is designed to fit the Raspberry Pi and can make use of its GPIO signals but can also be used as a stand-alone adapter with any board capable of USB data signals.

USECASE AND FEATURES

Typical use cases

- Quick IoT transition
- IoT gateway
- Raspberry Pi add-on
- Testing and evaluation
- Software integration
- Troubleshooting
- Diagnostics
- Log capturing

Key features

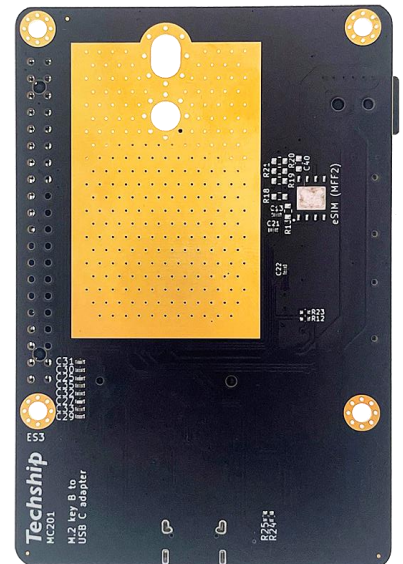
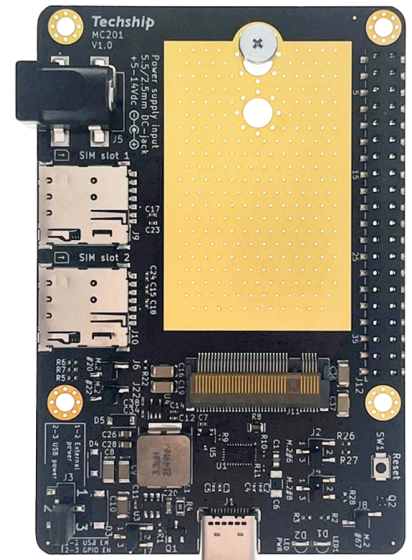
- 40 pin GPIO header socket which fits the Raspberry Pi 4
- Sturdy DC-DC step-down power supply circuitry
- 5 to 14 V DC external power supply input possible
- Dual SIM cards (and eSIM ready)
- Thermal planes for heat dissipation with thermal pads
- Data interface selection jumpers (vendor specific)
- Discharge circuitry when USB plug power supply is turned off
- Cellular connectivity to any computer with USB data interface

TECHSHIP M.2 KEY B TO USB C ADAPTER SERIES

MC201

SPECIFICATIONS

Adapter Model	MC201
Dimensions	
Width	57 mm
Length	85 mm (including USB C socket: 86 mm)
Temperature range	
Operational	-20°C to +75°C
Slot-in card	
Form factor	M.2 key B data card
Supported card lengths	42 mm, 50 mm, 52 mm
Output voltage	+3.4 V DC
Maximum output current	4000 mA (with external power supply) ~2300 mA (by USB3 type A plug supply) ~1200 mA (by USB3 specification) ~650 mA (by USB2 specification)
SIM card interfaces	
Type	4FF nano SIM card holder with card detect switch
Quantity	2x (primary + secondary)
Control signal pin headers	
Data interface selection (Vendor specific)	1x 1.27 mm header, pull-up/down for pin 20 1x 1.27 mm header, pull-up for pin 22
GPIO interface selection	3x 1.27 mm header for W_disable, reset and DC power circuit enable
Full card power state	1x 1.27 mm header, pull up/down for pin 6
Indicator LEDs	
Green LED	DC-DC power circuit enabled state
Blue LED	WWAN activity signal state
External power supply input	
Connector type	5.5 mm/2.5 barrel jack positive centre
Voltage rating	Recommended: +5 V to 14 V DC Absolute min/max: +4.5 V to 16 V DC
Power rating	16 W capable supply
USB connector	
Type	USB3 type C plug
Electrical rating	+5 V DC (15 W / 3000 mA capable supply)
Signal interfaces	USB3, USB2
Package content	
Adapter	1x MC201
Distance	1x M3x2.5 mm steel distance
Screw	2x M3x2 mm steel screw
Pin header jumper	6x 1.27 mm (for signal pin headers) 1x 2.54 mm (for USB or external powered mode)
Compliance	
Environmental	RoHS
Others	
Country of origin	Sweden



Web and Support
Techship.com

Europe
sales@techship.com
+46 (0) 31 730 32 00

North America
americas@techship.com
+1 (919) 659 8191