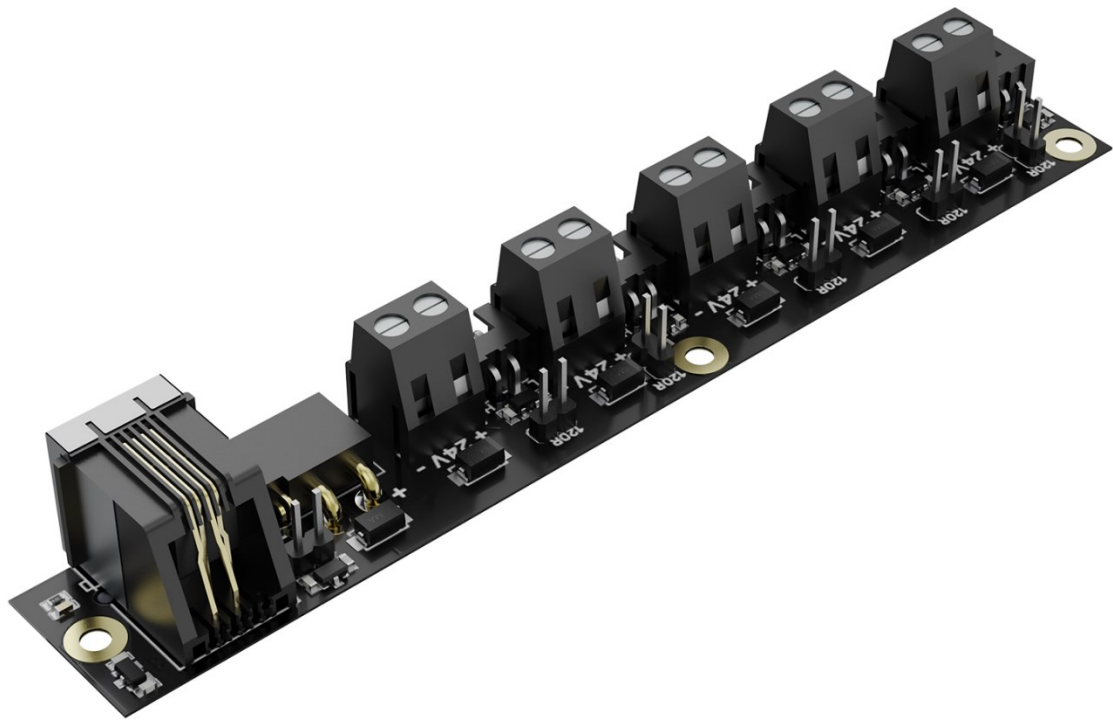


**BIGTREE TECH**

# CEB V1.0

## User Manual



## Revision Log

Version	Date	Revisions
v1.00	April 18th, 2024	Initial Version

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## Product Profile

The BIGTREETECH CEB V1.0 is an interface adapter board designed for effective CAN communication protocols.

## Feature Highlights

- The compact design of the board allows it to fit perfectly with all standard printer aluminum extrusions, making the installation process quick and simple.
- The board is designed in a way that ensures the wires exit in a uniform direction, promotes tidy wiring while improving the overall look.
- ESD protection chips and filter capacitors are added on each CAN port to safeguard the connected CAN tool boards from static damage.
- TVS diodes are added on power inputs to safeguard the connected CAN tool boards from surges and static damage.
- Supports various interfaces for compatibility with most CAN devices in the market.
- 120R terminal resistor selectable via jumper for DIY use.
- Our open source housing is available for printing use, facilitating easier installation and protection of the CEB V1.0.

## Specifications

Dimensions: 137.5mm x 20mm (Refer to the BIGTREETECH CEB V1.0-SIZE.pdf)

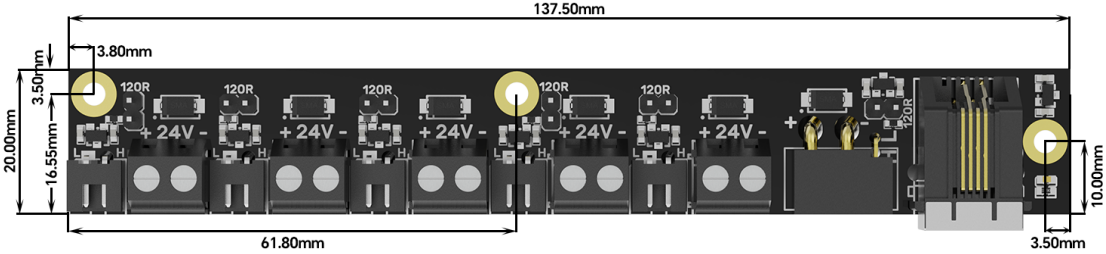
Power Input: DC 12-24V 5PCS

CAN Interface: 5x XH2.54 2-pin ports, 1x XT30 port, and 1x RJ11 port

Terminal Resistor: 120R, selectable via jumper

Dimensions

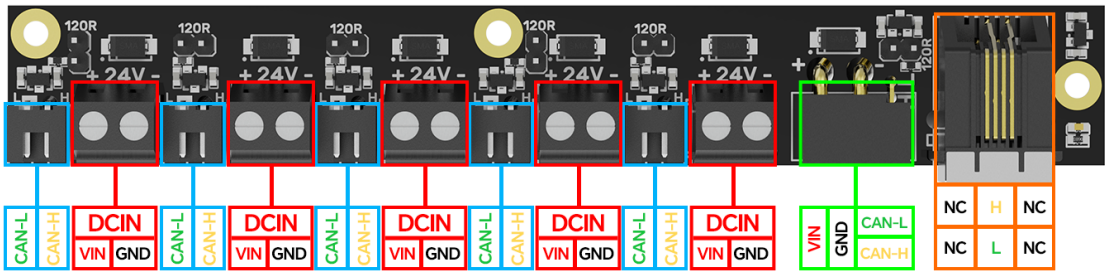
Dimension



Peripheral Interface

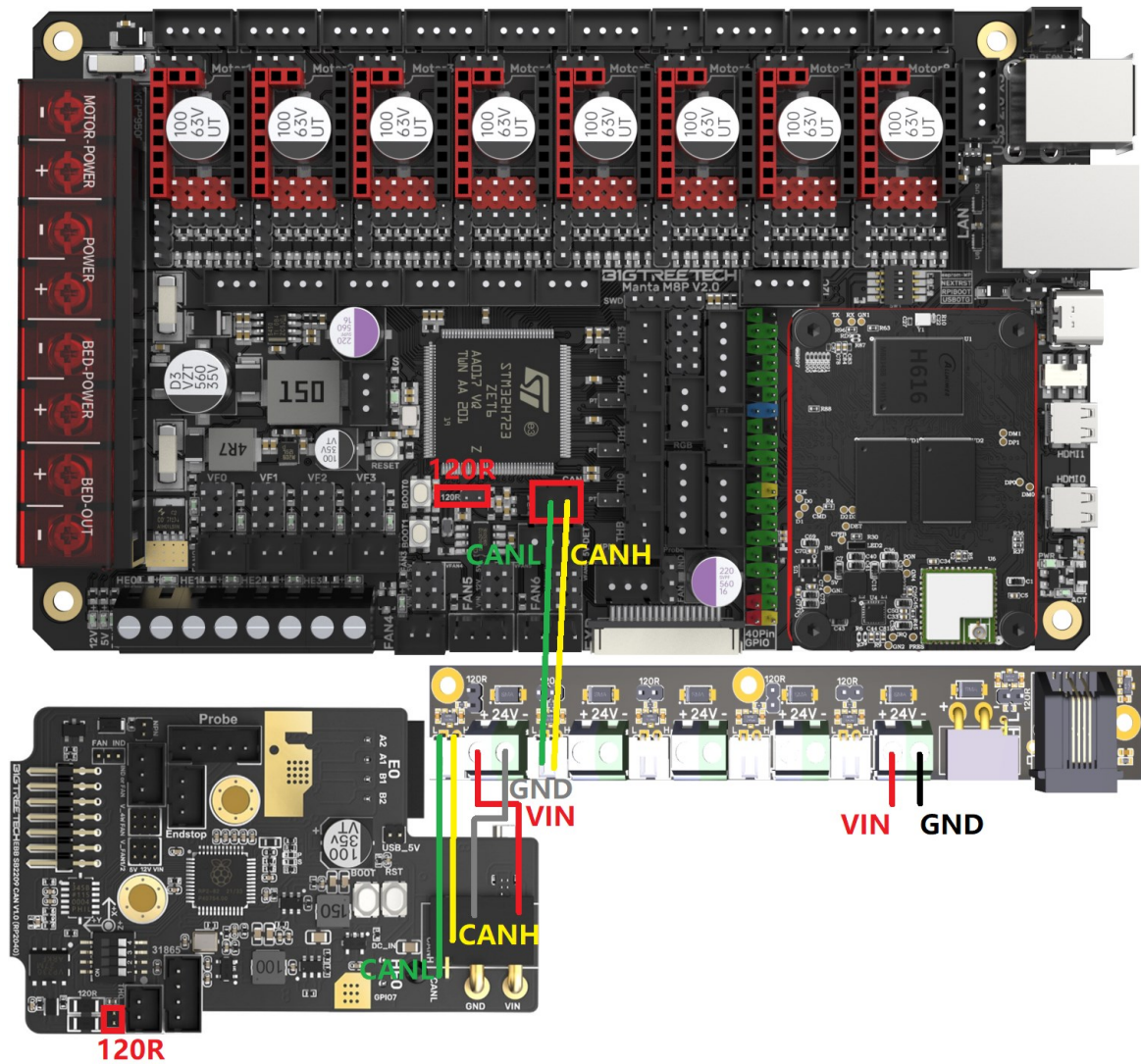
Pin Description

BIGTREETECH CEB V1.0-Pin

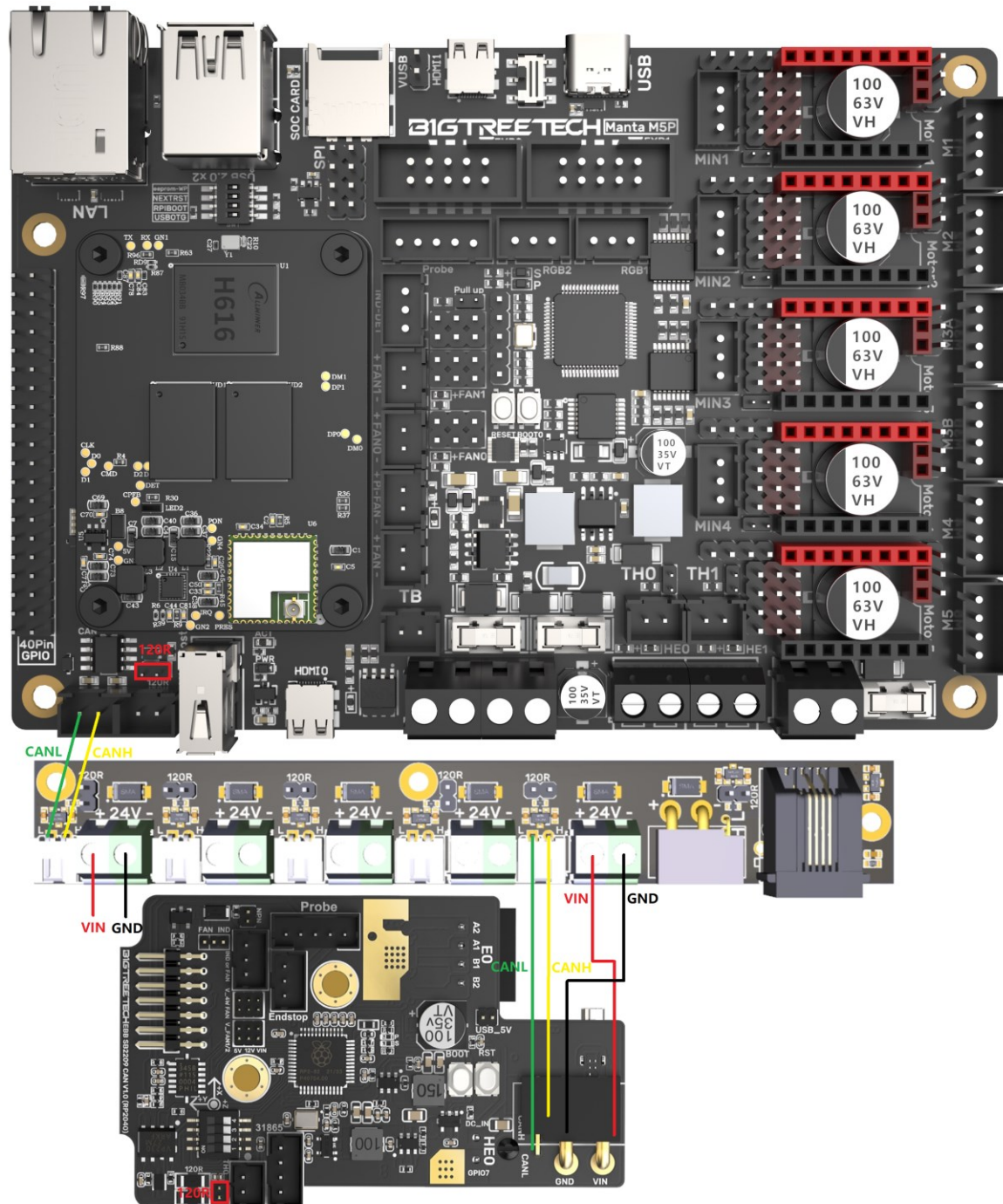


## Examples of Wiring

### CEB V1.0 + MANTA M8P + EBB SB2209

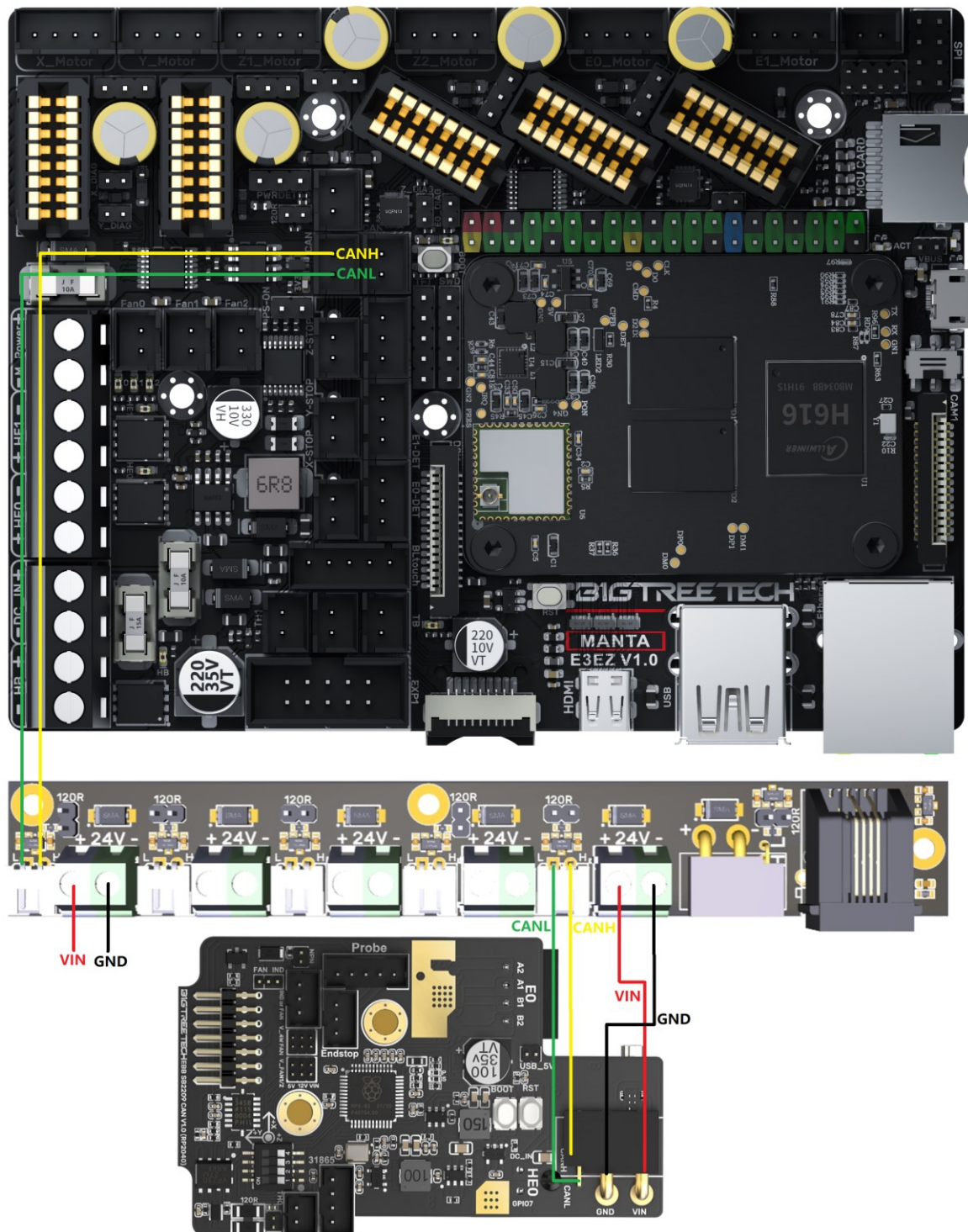


## CEB V1.0 + MANTA M5P + EBB SB2209



















## CEB V1.0 + MANTA E3EZ + EBB SB2209



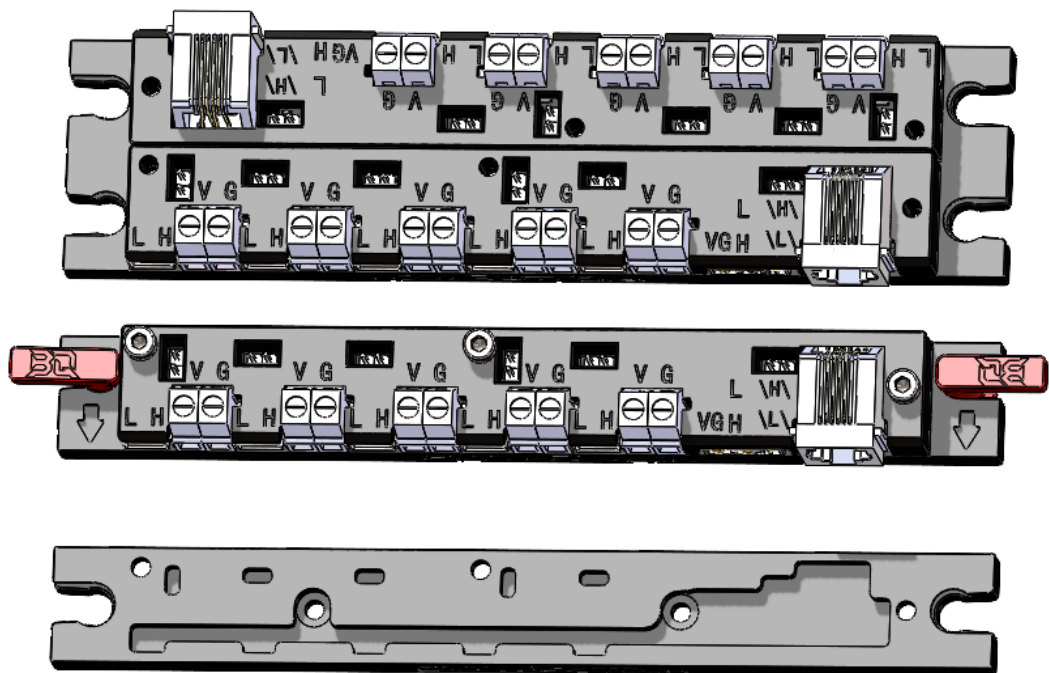


## Pre-designed Assembly Model

Model files list:

-  1.jpg
-  2.jpg
-  Double plate.STEP
-  Double plate.stl
-  Reference image.png
-  Reinforced upper cover (excluding wire sequence).STEP
-  Reinforced upper cover (excluding wire sequence).stl
-  Reinforced upper cover (including wire sequence).STEP
-  Reinforced upper cover (including wire sequence).stl
-  Single board centered.STEP
-  Single board centered.stl
-  Single board side installation.STEP
-  Single board side installation.stl
-  Snap.stl

Render:



## **Safety Tips**

- Ensure that the power is off before attempting the wiring.
- Exercise good judgement when choosing terminal resistors. Determine whether the device is a terminal device or if it already includes a terminal resistor. If so, do not use a jumper for the terminal resistor.
- Use the protective housing when installing the CEB V1.0, in order to prevent short circuits between the aluminum profile and the bottom pins of the CEB V1.0, as this can cause burnout damage.
- Ensure that the wires are assembled in the correct order to prevent communication issues.