

# 6 Slot Backplane

A backplane which supports up to six expansion cards, meant to go into a 3U VME crate.

[image-1643962680396.png](#)

## Features

- Direction-controlled buffers for address and data bus
- Mixer for audio from CPU board and expansion slots
- Detection of installed peripheral cards via detect lines
- An I<sup>2</sup>C bus switch to allow CPU board independent access to each slot's sideband bus
- Extremely low jitter clock distribution

It's intended to be used in conjunction with the [backplane management](#) card for power, but the required +5V and +12V rails can also be provided through a 3.81mm pitch pluggable terminal block instead.

## Assembly Notes

Here are some notes about hardware revisions.

### Rev 1

- The ID EEPROM is an AT24CS16, which has a different protocol than the AT24CS32 specified in the schematic. The address pins are also "NC" there
- Drop resistors for orange/yellow LEDs (R401, R107, R108) should be a lower value
  - R401 probably got assembled wrong
- Drop resistors for yellow LEDs (R101, R102) should be slightly higher
  - Or, we just spec shittier green LEDs
  - They're just slightly too bright

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Revision #4

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