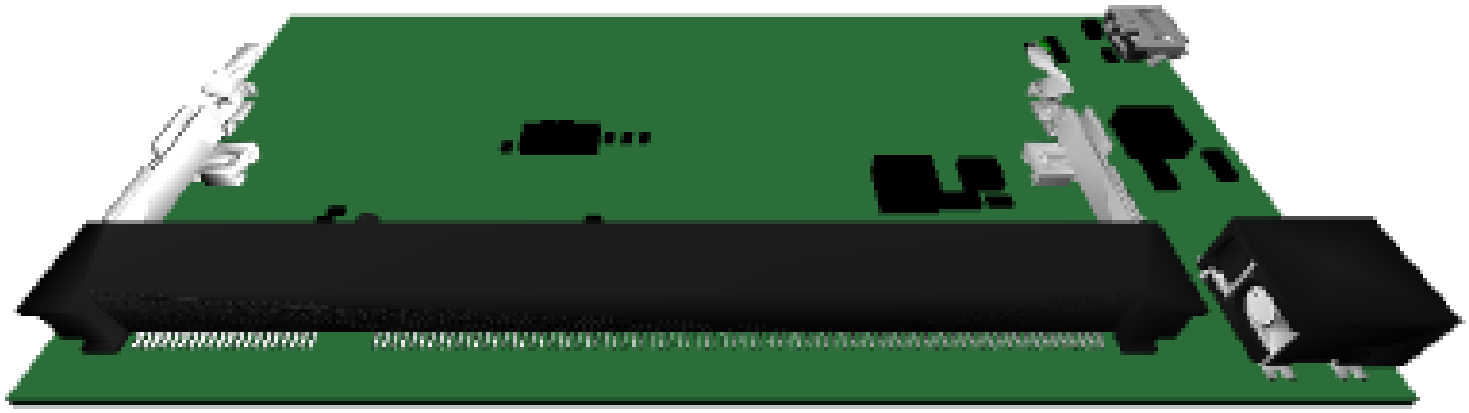
Raspberry Pi Compute Module Flasher



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Board Description

Simple board that is used to flash the Raspberry Pi Compute module. Power can be configured to draw from the USB or barrel connector.

Board Dimensions

8.75cm x 4.25cm

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1 Modules on Board

1.1 COM Connectors

1.1.1 Raspberry Pi Compute Module Connector (v9) (1)

The Raspberry Pi Compute Module provides great variety of GPIO and special purpose pins. It uses a Broadcom CPU on-board and also has an eMMC for booting up. It requires 6 separate voltages; the module built into geppeto requires only 2: one at 5.0V and one at 3.3V; sequecing on powerup is managed within the Geppetto modular design.

It requires:

- VCC_3.3 from 3.3V/1.5A Regulator (3)

The Geppetto Pi Compute connector provides the following outputs:

- USB_CLIENT to Micro-B Jack (4)
- EMMC_DISABLE_N to Green LED (5)

1.2 Power Connectors

1.2.1 Barrel Connector (5V 3A) (v6) (2)

This power jack is compatible with Gumstix 5V/3.5A DC power adapter using a 4.0mm x 1.7mm barrel connector. It provides more current than a standard 5V DC power supply, suitable for use with multi-processor designs.

This power jack provides 5V to the following modules:

- 3.3V/1.5A Regulator (3)

1.3 Power

1.3.1 3.3V/1.5A Regulator (v9) (3)

This DC to DC step down regulator provides a 3.3V DC output at 1.5A needed by certain components on this board. It is capable of accepting an input voltage between 3.1 to 16V DC. Currently, its input is 5V from Barrel Connector (5V 3A) (2).

This regulator provides 3.3V to:

- Raspberry Pi Compute Module Connector (1)
- Green LED (5)

1.4 USB

1.4.1 Micro-B Jack (v8) (4)

A USB micro-B port allows your design to connect as a USB device to a USB host.

This module is connected to USB_CLIENT on Raspberry Pi Compute Module Connector (1).

1.5 IO

1.5.1 Green LED (v13) (5)

This 1608 standard size green LED provides an indicator for the signal EMMC_DISABLE_N on Raspberry Pi Compute Module Connector (1).

2 Module Connections Graph

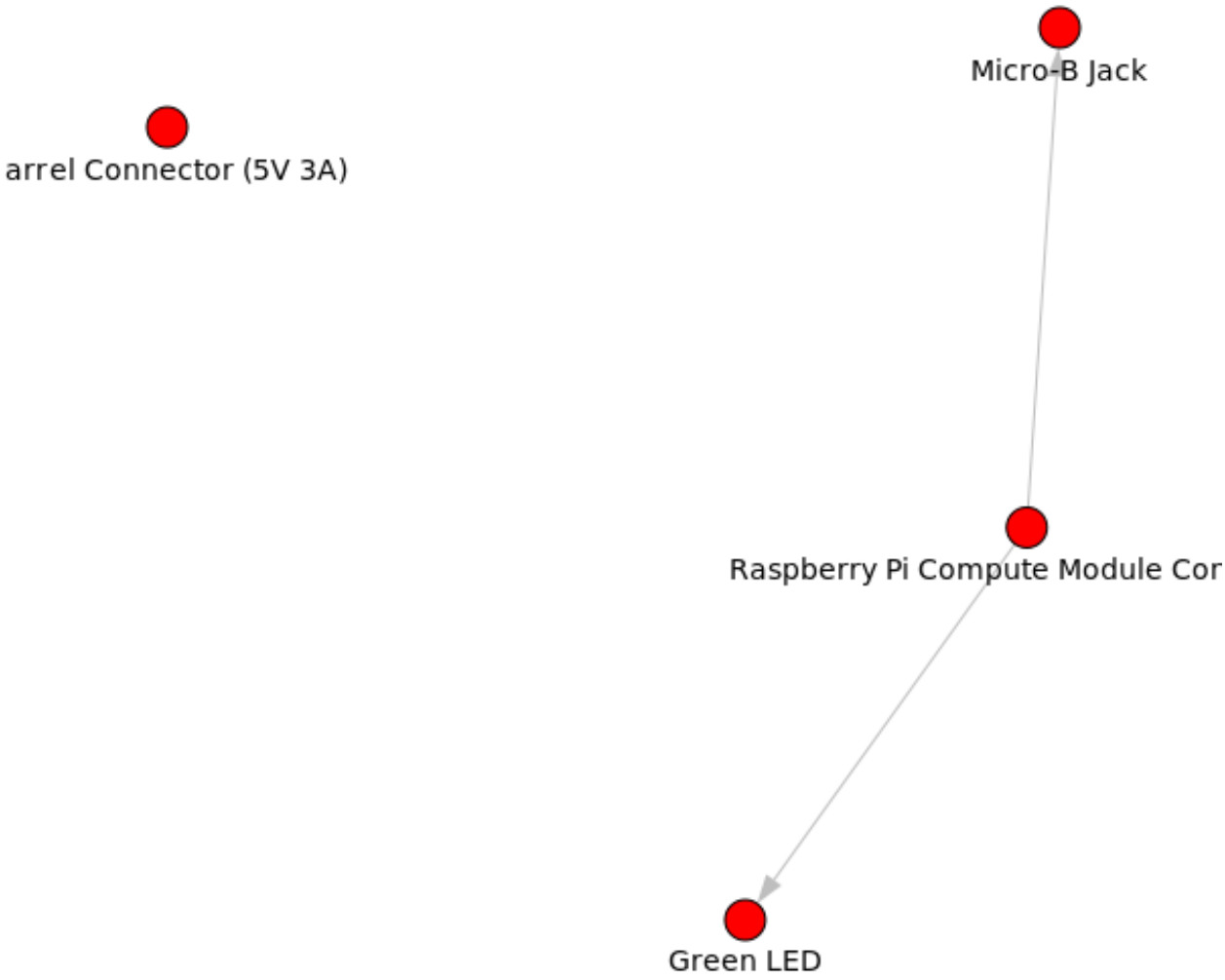
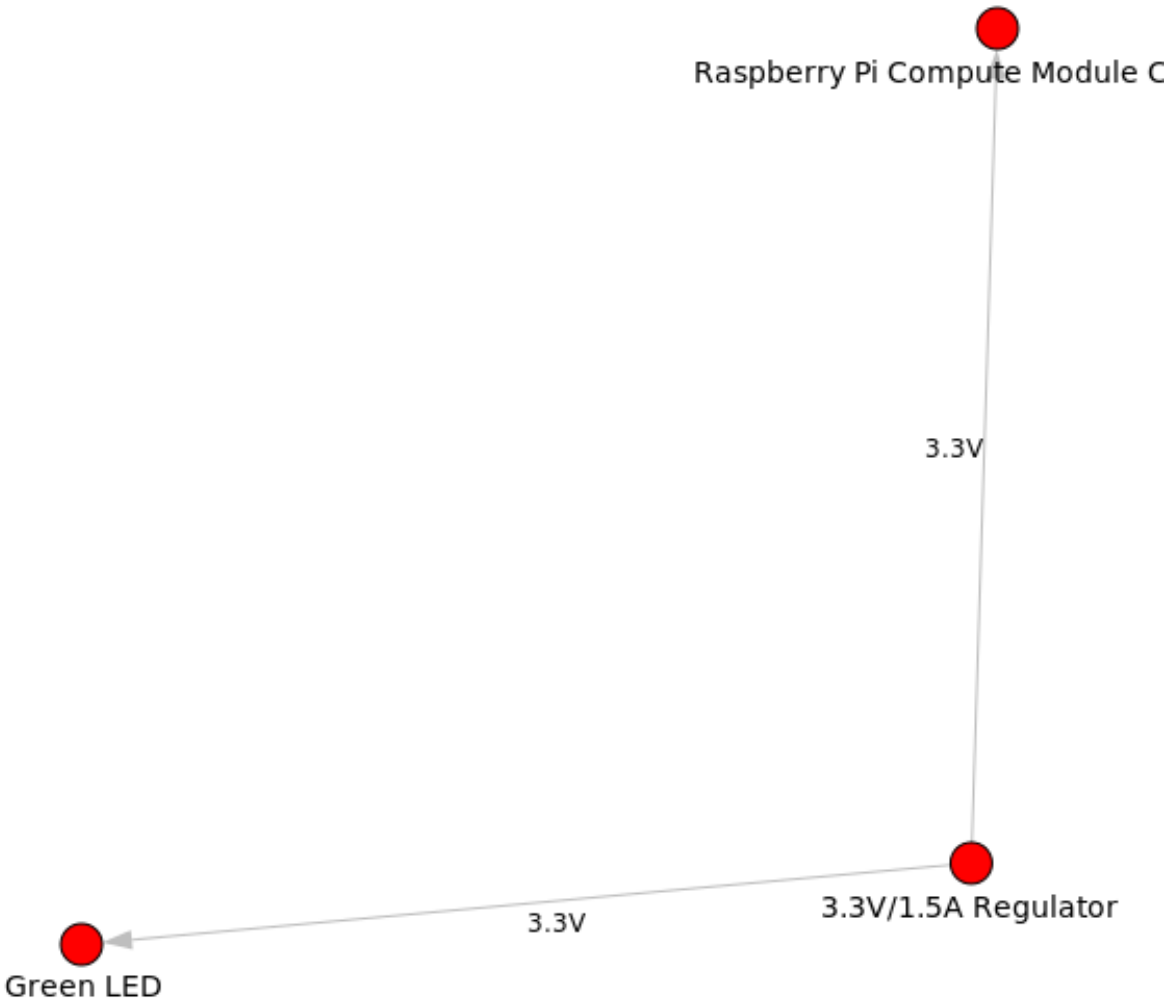


Figure 1: excludes power modules

3 Module Power Graph