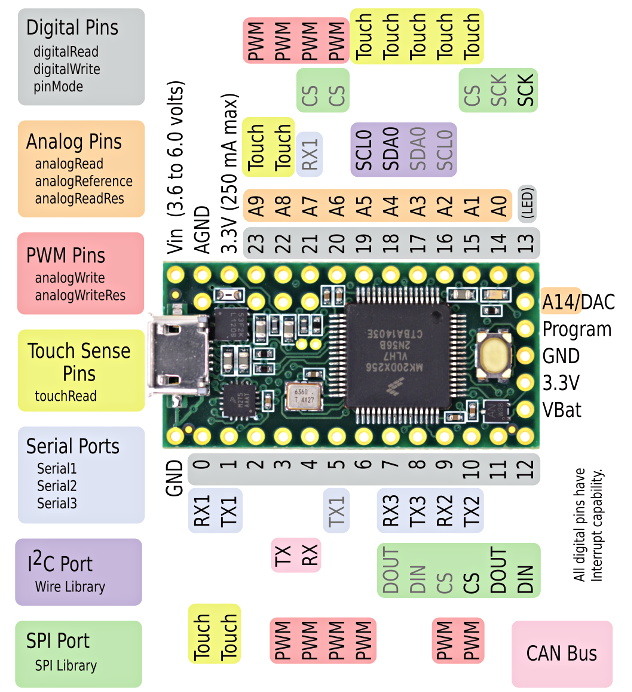
**Smart Breadboard Documentation**

**Breadboard Pinouts:**

Main:

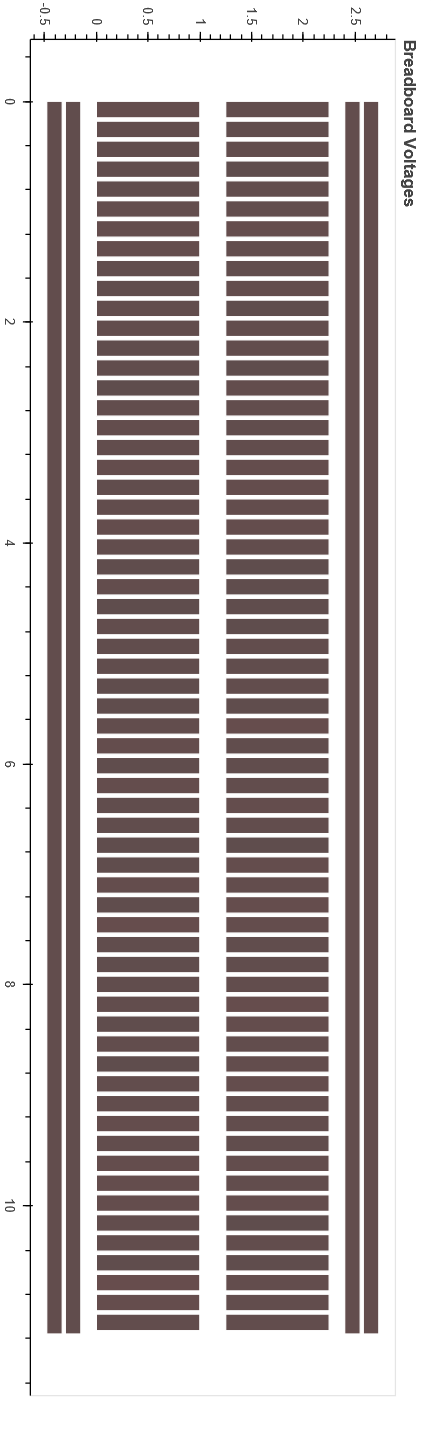
|  |  |  |
| --- | --- | --- |
| PCB Board |  | Teensy Pinout |
| 1 | EN | 4 |
| 2 | S0 | 12 |
| 3 | S1 | 11 |
| 4 | S2 | 10 |
| 5 | S3 | 9 |
| 6 | S4 | A0 |
| 7 | VCC | 3.3 V |
| 8 | GND | GND |

Auxiliary:

|  |  |  |
| --- | --- | --- |
| PCB Board |  | Teensy Pinout |
| 1 | S0 | 8 |
| 2 | S1 | 7 |
| 3 | S2 | 6 |
| 4 | S3 | 5 |

**Teensy Breakout Board:**

|  |  |
| --- | --- |
| Breakout Board | Teensy Pinout |
| 1 | 3.3V |
| 2 | GND |
| 3 | GND |
| 4 | A0 |
| 5 | 4 |
| 6 | 5 |
| 7 | 6 |
| 8 | 7 |
| 9 | 8 |
| 10 | 9 |
| 11 | 10 |
| 12 | 11 |
| 13 | 12 |



Left column: 0-61

Left NEG rail: 62

Left POS rail: 63

Right column: 64-125

Right NEG rail: 127

Right POS rail: 126

**Format to control:** (strings)

**Evaluate all nodes:**

all\*

**Evaluate a single node with time:**

nodeIndex,samplingRate + “\*” + “single”

**Material list:**

|  |  |
| --- | --- |
| Quantity | Item |
| 6 | Flush head 4-40 x 5/8” screw |
| 8 | Flush head 6-32 x 3/4” screw |
| 8 | Acrylic spacers – 3.25 mm thick |
| 8 | Nylon spacers 6-32 |
| 256 | Pogo pins |

Acrylic sheet clear – 6 mm thick

**Assembly Process:**

- Laser cut the 6mm thick acrylic sheet.

- Check with the PCB for up/down orientation.

- Countersink the acrylic using the mill press.

- Tap the 4-40 holes for the solderless breadboard.

- Place the 6-32 screws in first and then secure the breadboard using the flush head screws (Note: If the acrylic threading could not hold the upward force of the PCB, consider using slightly longer screws and secure with 4-40 nuts.)

- Place the acrylic spacers on 6-32 screws before placing down the PCB.

- Secure the PCB in place using the 6-32 spacers.