

GOCUPI

<https://gocupi.com> for project info
<https://github.com/brandonagr/gocupi-stl> for the source code
<https://github.com/earthtown/gocupi-stl> for 3D printed part files.
 gocupi main board stacks on to the GPIO of the Raspberry Pi. This board uses a 12V power supply to power the stepper motors and supplies +5V source for the Raspberry Pi. The ATmega328P uses 3.3V logic to communicate with the Pi, the A3967 chips also use 3.3V logic. Commands/files are processed on the Pi using the gocupi source which is written in Go (<http://golang.org>). The data is passed to the ATmega328P which feeds the step and direction information to both A3979s which directly control the stepper motors.

ATmega328P

ATmega328P running the Arduino optiboot bootloader is connected to the Raspberry Pi GPIO serial pins for communication during normal use. Also connected to the SPI bus for programming from the Arduino IDE on the Pi.

