

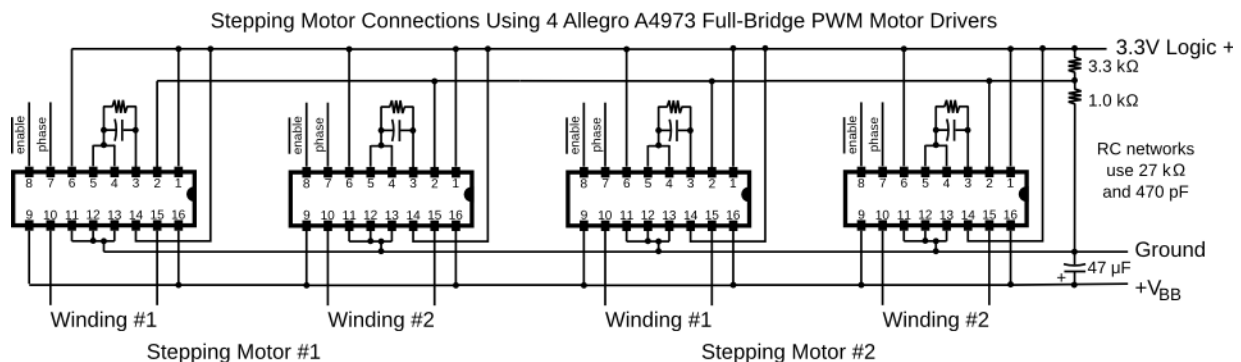
Driving Stepping Motors

Stepping motors allow precise setting of angular position. The Gertboard motor driver is not able to run a stepping motor because there more than two lines that need to be manipulated in to drive a stepping motor. I studied that Gertboard driver and its chip specifications and chose the following arrangement based on Allegro A4973 drivers for controlling a pair of cheap stepping motors.

The Allegro A4973 stepping motor driver chips are documented at:

<http://www.allegromicro.com/en/Products/Motor-Driver-And-Interface-ICs/Brush-DC-Motor-Drivers/A4973.aspx>

On that page is also a link to an Application Note that shows the circuit configuration that I used. Here is a schematic of my breadboard for the A4973 drivers:



I usually go to <http://mouser.com> for electronic parts. Ask for their printed catalog. It is huge, full of useful components and worthy of paging through to see what is available to the electronic engineer. Their service on 20 orders I have made over the years has been flawless.

A useful introduction to the use of stepping motors is provided by

<http://homepage.cs.uiowa.edu/~jones/step/>

and a nice glossary of stepping motor terms is at

<http://www.applied-motion.com/support/step-motor-glossary>

As always, <http://en.wikipedia.org> is your friend for understanding strange terminology and concepts!