Resources for Lab 3

**Loads**

<https://www.amazon.com/gp/product/B077ZTBWPV/ref=ox_sc_saved_title_1?smid=A35S2O80T8SU95&psc=1>

**Boost Converter**

[**https://www.elprocus.com/12v-to-24v-dc-converter-using-lm324/**](https://www.elprocus.com/12v-to-24v-dc-converter-using-lm324/)

[**http://www.circuitstoday.com/12v-to-24v-dc-dc-converter**](http://www.circuitstoday.com/12v-to-24v-dc-dc-converter)

**Buck Converter**

[**https://www.instructables.com/id/Buck-Converter-DC-DC/**](https://www.instructables.com/id/Buck-Converter-DC-DC/)

[**https://www.mouser.de/pdfdocs/BuckConverterDesignNote.pdf**](https://www.mouser.de/pdfdocs/BuckConverterDesignNote.pdf)

[**https://circuitdigest.com/electronic-circuits/12v-to-5v-buck-converter-circuit-diagram**](https://circuitdigest.com/electronic-circuits/12v-to-5v-buck-converter-circuit-diagram)

**Variable Load**

[**https://pdfserv.maximintegrated.com/en/ds/DS2890.pdf**](https://pdfserv.maximintegrated.com/en/ds/DS2890.pdf)

[**https://www.mouser.com/datasheet/2/256/DS1804-1389127.pdf**](https://www.mouser.com/datasheet/2/256/DS1804-1389127.pdf)

**Eagle**

[**https://www.youtube.com/watch?v=1AXwjZoyNno**](https://www.youtube.com/watch?v=1AXwjZoyNno)

**Electronic Load**

[**http://powersupply.blogs.keysight.com/2012/08/how-does-electronic-load-regulate-its.html**](http://powersupply.blogs.keysight.com/2012/08/how-does-electronic-load-regulate-its.html)

[**http://paulorenato.com/index.php/electronics-diy/91-constant-current-load**](http://paulorenato.com/index.php/electronics-diy/91-constant-current-load)

[**https://www.codrey.com/electronic-circuits/simple-electronic-dc-load/**](https://www.codrey.com/electronic-circuits/simple-electronic-dc-load/)

<https://www.amazon.com/KNACRO-X9C103S-Digital-Potentiometer-Arduino/dp/B01M9ESPSP/ref=sr_1_3?keywords=digital+potentiometer+10K&qid=1553375542&s=gateway&sr=8-3>

<https://www.mouser.com/ProductDetail/ARCOL-Ohmite/HS100-1R-F?qs=sGAEpiMZZMtbXrIkmrvidIuVqH5yznZPXNrYbznUA7HmgrHZStVNCQ%3D%3D>

<https://www.renesas.com/us/en/www/doc/datasheet/x9c102-103-104-503.pdf>

**Relay circuit**

[**https://electronics.stackexchange.com/questions/209904/power-mosfet-or-relay**](https://electronics.stackexchange.com/questions/209904/power-mosfet-or-relay)

[**https://www.mouser.com/datasheet/2/308/2N7000-D-33553.pdf**](https://www.mouser.com/datasheet/2/308/2N7000-D-33553.pdf)

**Power MOSFET**

[**https://www.st.com/content/ccc/resource/technical/document/datasheet/f6/e5/f2/7a/32/96/43/49/CD00002318.pdf/files/CD00002318.pdf/jcr:content/translations/en.CD00002318.pdf**](https://www.st.com/content/ccc/resource/technical/document/datasheet/f6/e5/f2/7a/32/96/43/49/CD00002318.pdf/files/CD00002318.pdf/jcr:content/translations/en.CD00002318.pdf)

[**https://www.mouser.com/datasheet/2/308/HUF75631S3S-1301056.pdf**](https://www.mouser.com/datasheet/2/308/HUF75631S3S-1301056.pdf)

[**https://www.mouser.com/datasheet/2/308/FDH45N50F-1122856.pdf**](https://www.mouser.com/datasheet/2/308/FDH45N50F-1122856.pdf)

**OP-AMP**

[**https://www.st.com/content/ccc/resource/technical/document/datasheet/61/46/87/01/98/ed/44/c5/CD00000464.pdf/files/CD00000464.pdf/jcr:content/translations/en.CD00000464.pdf**](https://www.st.com/content/ccc/resource/technical/document/datasheet/61/46/87/01/98/ed/44/c5/CD00000464.pdf/files/CD00000464.pdf/jcr:content/translations/en.CD00000464.pdf)

**Inductor**

<https://www.mouser.com/datasheet/2/281/kmp_1400-38440.pdf>

**Power resistor**

<https://www.mouser.com/datasheet/2/611/rhx-series-1074331.pdf>

<https://www.mouser.com/datasheet/2/54/bourns_PWR247T-100-1265914.pdf> this one

**Logic Level mosfet**

<https://www.mouser.com/datasheet/2/308/FQP4N20L-1306218.pdf>

<https://www.mouser.com/datasheet/2/308/IRL640A-1306547.pdf> for the converters

<https://www.mouser.com/datasheet/2/308/FDP5800-1305771.pdf> better one for converters

**Buck Capacitor**

<https://www.mouser.com/ProductDetail/Illinois-Capacitor-CDE/255PHC600K?qs=sGAEpiMZZMukHu%252BjC5l7YdPy5gANgvimOYsaI1uTFpA%3D>

**Buck Inductor**

**Fiber Optics**

<https://www.nature.com/articles/s41598-017-03206-w.pdf>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5336035/>

<https://www.medicaldesignbriefs.com/component/content/article/mdb/features/articles/28363>

<https://iopscience.iop.org/article/10.1088/1755-1315/64/1/012007/pdf>

[file:///C:/Users/cole\_/Downloads/sensors-10-11212.pdf](file:///C:\Users\cole_\Downloads\sensors-10-11212.pdf)

[file:///C:/Users/cole\_/Downloads/2011OFS-21PinetPressuremeasurementwithOFS-CommercialtechnologiesandapplicationsPublishedversion7753\_500.PDF](file:///C:\Users\cole_\Downloads\2011OFS-21PinetPressuremeasurementwithOFS-CommercialtechnologiesandapplicationsPublishedversion7753_500.PDF)