

Kill-a-Watt Team Meeting 04/05/2016

Designs Review

- Ⓢ Tuesday, 12 April 12:30-1:30
- Ⓢ Circuits
- ↳ proof that they will work
- ↳ part numbers
- ↳ ratings for components
- Ⓢ No long powerpoints, takes too much work
- ↳ title
- ↳ main subjects
- ↳ overview
- ↳ circuit diagrams
- ↳ powerpoint ill suited for technical presentations
- Ⓢ Handouts
- ↳ timelines
- ↳ list of parts
- ↳ circuit handouts
- Ⓢ Times
- ↳ 30+- 10 minutes
- ↳ if it is made short, a lot more questions
- Ⓢ Impact on project
- ↳ compare and possibly choose a single design
- Ⓢ get the heat capacitance of heat sink
- ↳ based on what the heat sink
- ↳ time to come up to temperature based on heat capacitance
- ↳ temperature profile (thermal model)
- ✦ junction to case capacitance
- ✦ Find the thermal capacitance of the heat sink
- Ⓢ Rachel Peterson: Material Science
- ↳ thermal modeling
- ↳ Meeting Thursday: Bell 330 @ 3:30pm
- ↳ specific heat for the material
- ↳ junction heat happy? (below max rated)

NMOS Depletion Design

- Ⓢ Need to consider V_{ds} voltage breakdown

Converter Design

- Ⓢ need to get circuit and design

Building

- Ⓢ hands on build and test
- Ⓢ wide array of measurements
- Ⓢ prove that this can work in real world