5 Senior Design Research References

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Research: power supply and regulation

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This resource provides a discussion of the negatives and positives of using linear drop-out regulators involving power consumption/dissipation and complexity.

[1] S. Keeping, 'Understanding the Advantages and Disadvantages of Linear Regulators | DigiKey', *Digikey.com*, 2015. [Online]. Available: http://www.digikey.com/en/articles/techzone/2012/may/understanding-the-advantages-and-disadvantages-of-linear-regulators. [Accessed: 03- Sep- 2015].

This resource provides a closer look at linear drop-out regulators with application. It also supplies examples with TI components for showing pros and cons.

[2] M. Day, *Understanding Low Dropout (LDO) Regulators*, 1st ed. p. 7.

This resource provides a fundamental understanding of benefits and limitations of lithium-ion/lithium polymer technology for battery characteristics.

[3] Batteryuniversity.com, 'Advantages & Limitations of the Lithium-ion Battery - Battery University', 2015. [Online]. Available: http://batteryuniversity.com/learn/article/is\_lithium\_ion\_the\_ideal\_battery. [Accessed: 09- Sep- 2015].

This resource provides current development on the issue of battery aging and an understanding of the environmental effects on batteries.

[4] Dalhousie University, *Lithium chemical technology and life cycle testing*. 2015.

This resource provides a very detailed and informative description of various kinds of power supplies involving buck, boost, flyback, and rectification to name a few.

[5] *Switch-mode Power Supply Reference Manual*, 1st ed. 2015, p. 73.