

# Comparison and Design of High Efficiency Microinverters for Photovoltaic Applications

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Thesis submitted to the faculty of the  
Virginia Polytechnic Institute and State University  
in partial fulfillment of the requirements for the degree of

Master of Science  
In  
Electrical Engineering

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November 14, 2014

Blacksburg, Virginia

Keywords: Microinverter, DC-AC, PV, Wideband-gap

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This is for Figure 3.12: Permeability vs Temperature for Magnetics Inc Powder Core Materials.

## Draft 09/01/2009

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Description of item under review for fair use: Magnetics Inc., "Powder Cores," Catalog, Bulter, Pennsylvania, pp. 3-14. Report generated on: 12-09-2014 at : 10:06:53

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This is for Figure 3.13: Inductance vs Current for Powder and Ferrite Core Inductors.

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Name: Jason C. Dominic

Description of item under review for fair use: Figure 1. L. Crane, "Ferrite and Powder Core Materials for Power Inductors," Coilcraft, Document 496-1, Feb. 2006, pp. 1-2.

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This is for Figure 3.33: EPC GaN HEMT Structure.

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Name: Jason C. Dominic

Description of item under review for fair use: Figure 1. S. Colino and R. Beach, Appl. Note AN002, "Fundamental of Gallium Nitride Power Transistors," Efficient Power Conversion, 2011.

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This is for Figure 3.4: DC Bias Effects on Ceramic Capacitors. and Figure 3.5: Temperature Coefficient Effects on Ceramic Capacitors.

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Name: Jason C. Dominic

Description of item under review for fair use: Johanson Dielectrics, "Basics of Ceramic Chip Capacitors," (December 1, 2007). Available: <http://www.johansondielectrics.com/technical-notes/product-training/basics-of-ceramicchip-capacitors.html>.

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This is for Figure 3.8: Permeability vs. Temperature for EPCOS N97 Ferrite. and Figure 3.9: Saturation Flux Density Curves for EPCOS N97 Ferrite.

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Name: Jason C. Dominic

Description of item under review for fair use: EPCOS, "Ferrites and accessories," N97 datasheet, Sept. 2006. Available:  
<http://www.epcos.com/blob/528886/download/4/pdf-n97.pdf>.

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This is for Table 3.3: Class 1 Ceramic Capacitor Letter Codes for Temperature Coefficients. and Table 3.4: Class 2 Ceramic Capacitor Letter Codes for Temperature Coefficients.

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Description of item under review for fair use: J. Prymak, M. Randall, P. Blais, and B. Long, "Why that 47 uF capacitor drops to 37 uF, 30 uF, or lower," Proceedings CARTS USA, 28 Symposium for Passive Electronics, 2008.

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