Technical Reference Note

Embedded Power for Business-Critical Continuity

Rev. 02.12.08 LGA C Eval Kit

LGA C Evaluation Kit







Technical Reference Note

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General Description

The LGAC series converters are high density, non-isolated converters for space sensitive applications requiring a range of 3A-20A. This document lists schematic diagrams and general directions on how to use the LGAC evaluation kit.

The LGAC series evaluation kit has been set up to only demonstrate the product and has not been optimized for any specific test condition. Numerous input and output capacitor locations have been left empty to allow for the addition of capacitors so different system conditions can be demonstrated.

The evaluation kit provides oscilloscope probe jacks to monitor Vout and PGood. Please note the PGood signal is not pulled high so a pull up voltage is required. A voltage can be connected to hole E20 to pull up PGood. The PGood signal has a $10k\Omega$ pull up resistor and a $3.01k\Omega$ pull down resistor. Be aware the PGood signal cannot exceed Vin at any time and has a maximum of 5V.

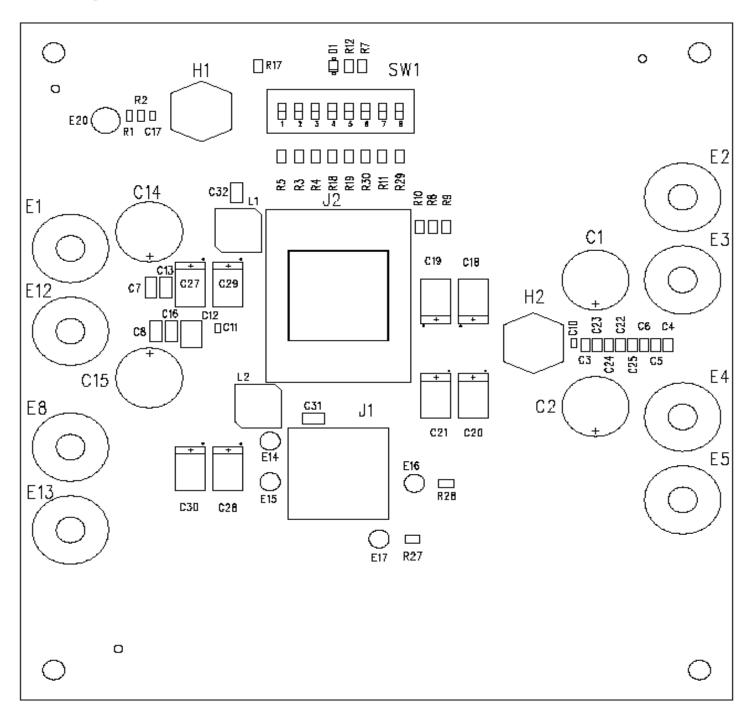
The output voltage is set to regulate at E16 and E17. The input voltage can be measured at E14 and E15. At these E locations the correct voltages can be measured so efficiency can be calculated.

The dipswitch bank, SW1, is set up to control the output voltage setting, output margining, and remote on/off. When changing switch states only one switch should be engaged at a time other than remote on/off. Switch 2 margins the output voltage down and switch 3 margins the output voltage up. R8, R9, and R10 control how far the module can be margined per the equations in the component datasheet.

Switch #	Output Setting
4	0.9 V
5	1.2 V
6	1.8 V
7	2.5 V
8	5 V

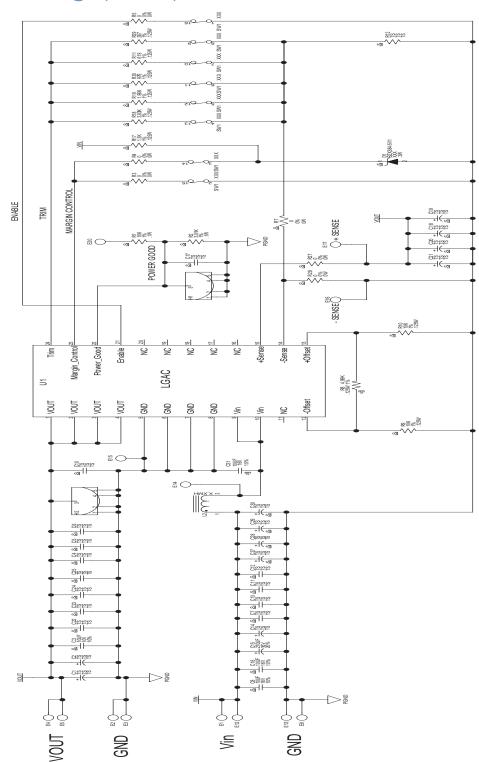
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Drawings



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Drawings (cont'd)



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