Adjustable Current Limit for AC Compressor and Magnetic Clutch

Project Title: Designed for: Public Release
Assembly Variant: 001

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Hidden information with no translation. The microcontroller is connected to a 10-bit ADC and an LDO. The LDO is TPS7B8233-Q1 and the 10-bit ADC is MSP430. The LDO provides a 3.3 V supply to the microcontroller and the 10-bit ADC. The microcontroller controls the A/C Compressor and Magnetic Clutch. The A/C Compressor has a nominal current of 1.5 A, and the Magnetic Clutch has a nominal current of 3.2 A. The microcontroller uses a 400 Hz signal to control the current limit. The microcontroller also has a 10-bit ADC to monitor current and voltage, ensuring accuracy within ±5%.
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Current Sense

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Engineer: Cameron Phillips

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TID #: TIDA-00971

Orderable: ChangeMe!

PCB Number: TIDA-00971
PCB Rev: E1

Assembly Note ZZ1

This Assembly Note is for PCB labels only.

Assembly Note ZZ2

These assemblies are ESD sensitive, ESD precautions shall be observed.

Assembly Note ZZ3

These assemblies must be clean and free from flux and all contaminants. Use of no clean flux is not acceptable.

Assembly Note ZZ4

These assemblies must comply with workmanship standards IPC-A-610 Class 2, unless otherwise specified.
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