

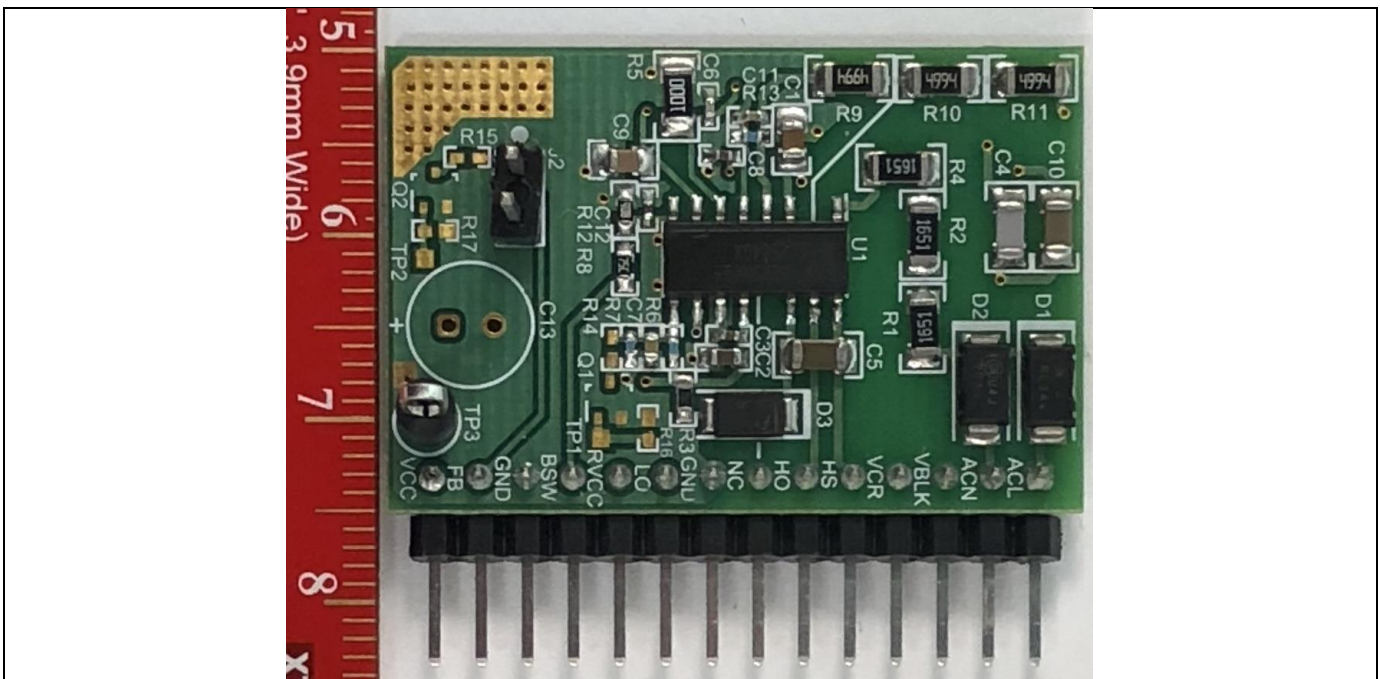
Test Report: PMP22088

LLC Resonant Converter Control Card Reference Design



Description

PMP22088 is a control card for LLC converter. It integrates all of the essential functions for controlling a LLC converter including the HV start-up, X-capacitor discharge and the drivers for the power FETs. By employing the advanced burst mode, it can also help the LLC converter to achieve ultra-low standby power even with PFC on. Furthermore, PMP22088 is very flexible for user to evaluate and suitable for any power rating of a LLC power board. It is easy to set up bench test with existing power stage by simple connections.



1 System Specification

1.1 Board Dimension:

1" x 1.5"

1.2 Test Waveforms are based on PMP22087 board.



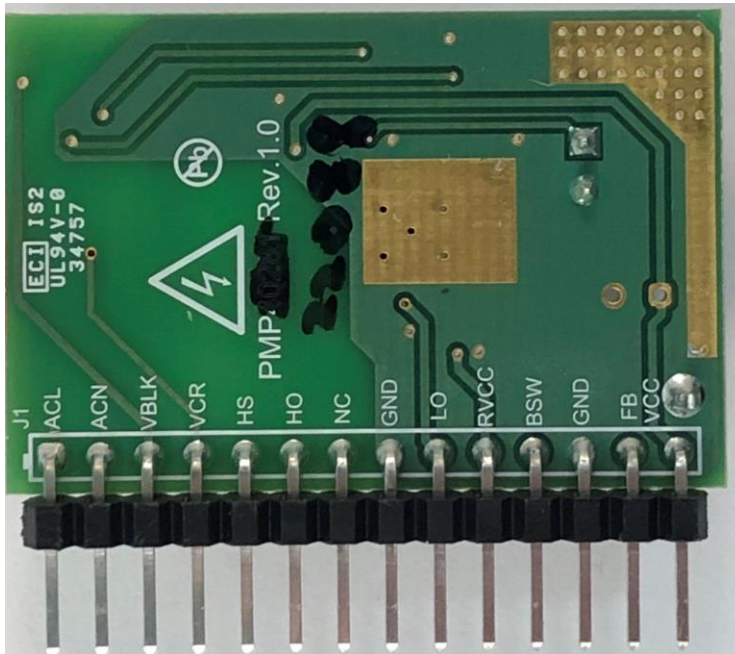
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2 Testing and Results

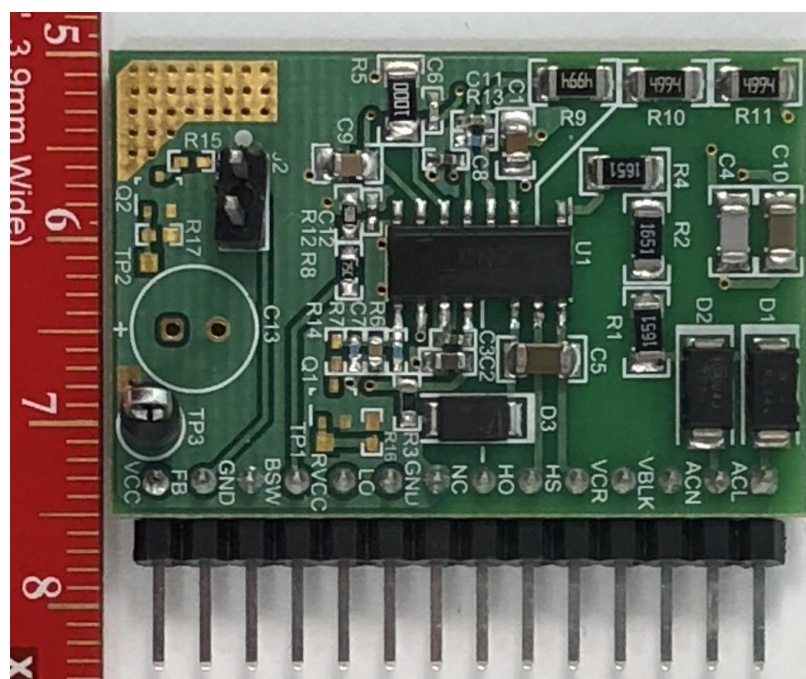
2.1 Board Photos

The photographs below show the top and bottom view of the PMP22088Rev A board. PMP22088Rev A circuit is built on PMP40281Rev 1.0 PCB board.

2.1.1 Top Side



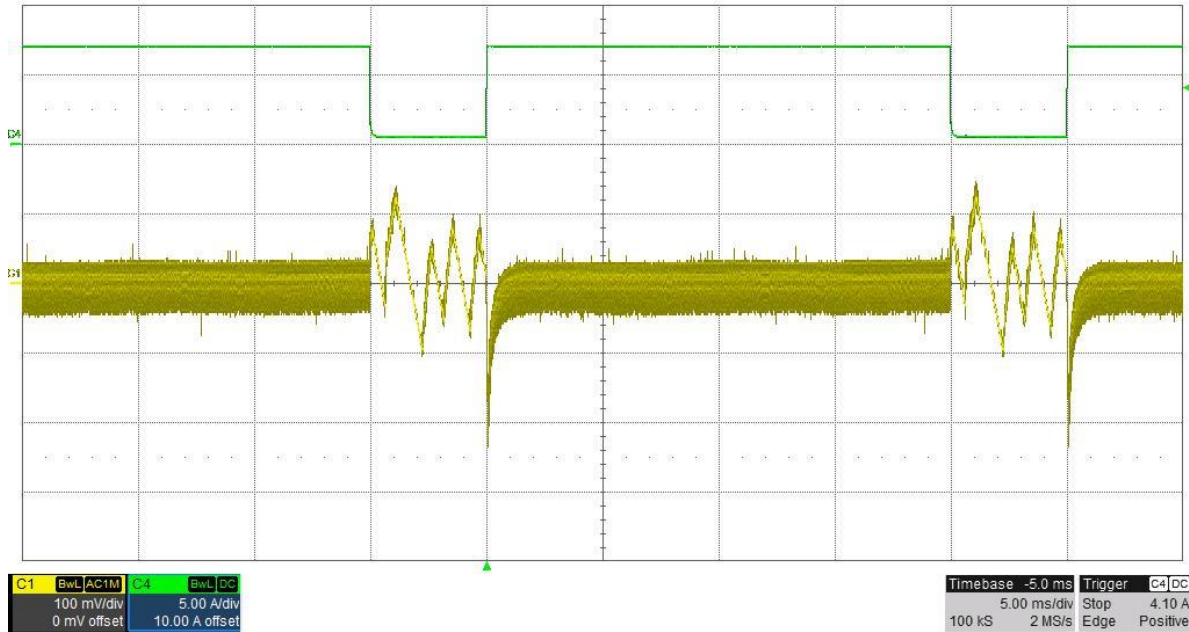
2.1.2 Bottom Side



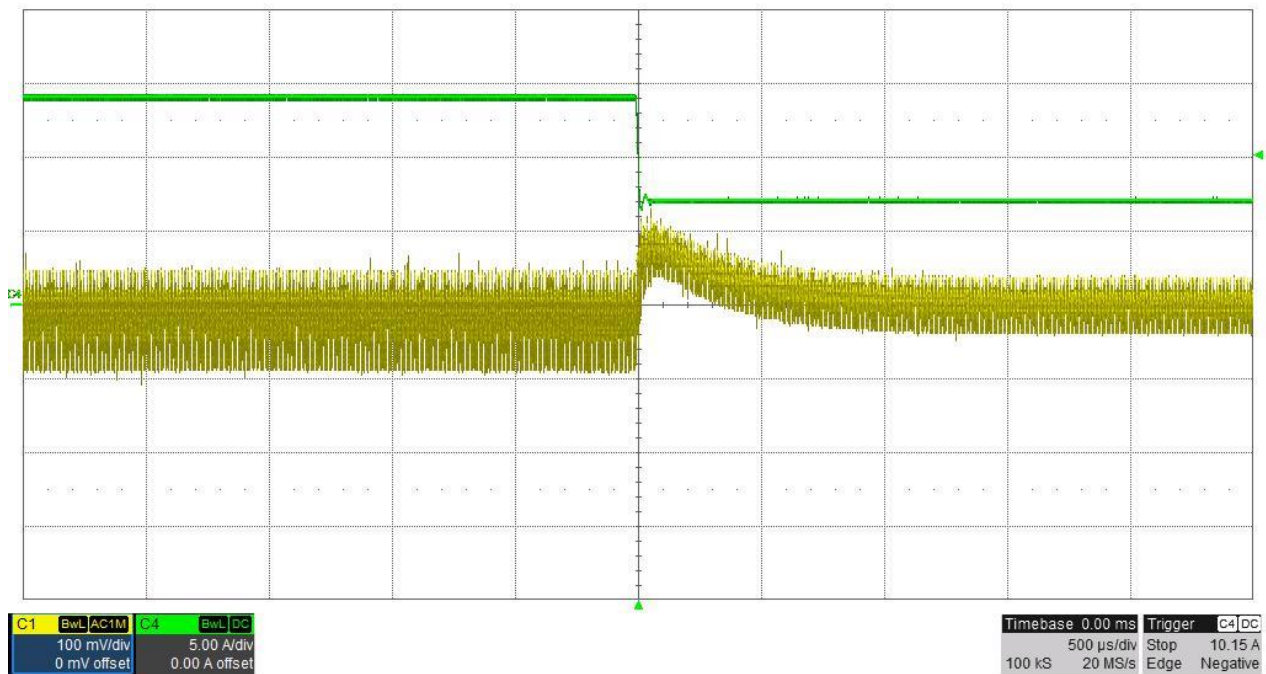
2.2 Load Response

Load response is tested at 230V_{AC}/50Hz input, where Channel 3 is the output voltage in AC level and Channel 4 is output current.

2.2.1 Load step from 0.1A to 7A:

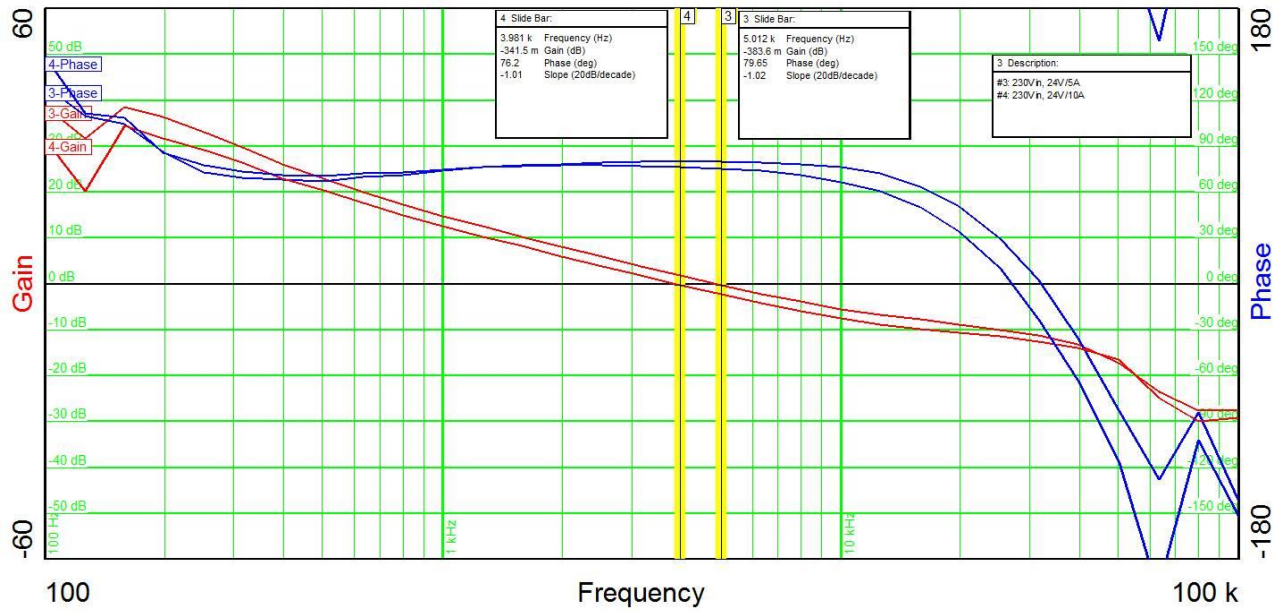


2.2.2 Load step from 7A to 14A:



2.3 Frequency Response

Frequency response of the LLC-SRC stage is tested with 230V_{AC}/50Hz input. Signal was injected on R215.



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