1 General

1.1 Purpose
This test report is to provide the detailed data for evaluating and verifying the PMP40281 which employs TI’s new LLC Controller ---- UCC25630X. PMP40281 is only a control card for the essential functions for a LLC converter. It must be connected to a LLC power stage for the full system evaluation.

1.2 Reference Documentation
Schematic: PMP40281_Sch.pdf
Gerber: PMP40281_GerberNCdrills.zip
Layer Plot: PMP40281_PCBlayers.pdf
Assembly Drawing: PMP40281_Assy.pdf
CAD File: PMP40281_CAD.zip
BOM: PMP40281_BOM.pdf

1.3 Test Equipment
Multi-meter (voltage): Fluke 287C
AC Source: Chroma 61503
DC Source: Chroma 62012P-600-8
E-Load: Chroma 63105A module
Oscilloscope: Tektronix DPO3054
Power Board: UCC25630-1EVM-291
<table>
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of bias rail after the rectifier diode. If the capacitance of this bulk cap on power board is small, install C13 on PMP40281

3 Performance Data and Waveform

Note: PMP40281 is only a daughter card for the control portion. The system performance is mainly related to the connected power board and the compensation network which is on the power board as well. The results below are only the example when PMP40281 is connected to UCC25630-1EVM-291.

3.1 Efficiency

![Efficiency @ Vin = 390V](image)

3.2 Start Up

Vin=390V and No Load
CH1: Vo 5V/Div
CH4: Io 5A/Div

Vin=390V and Full Load
CH1: Vo 5V/Div
CH4: Io 5A/Div

3.3 Output Voltage Ripple
Vin=390V and No Load
CH1: Vo (AC Coupled) 100mV/Div

Vin=390V and Full Load
CH1: Vo (AC Coupled) 100mV/Div
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