PMP7757

PMP7757 Test Results

Literature Number:SNVU009

Non Sync Buck Controller

TI reference design number: PMP 7757

(Formerly National Semiconductor design NSC1036)

Input: 32V to 36V
Output: 29.2V @ 6A

DC-DC Test Results

Table of Contents

1.0 Circuit Description

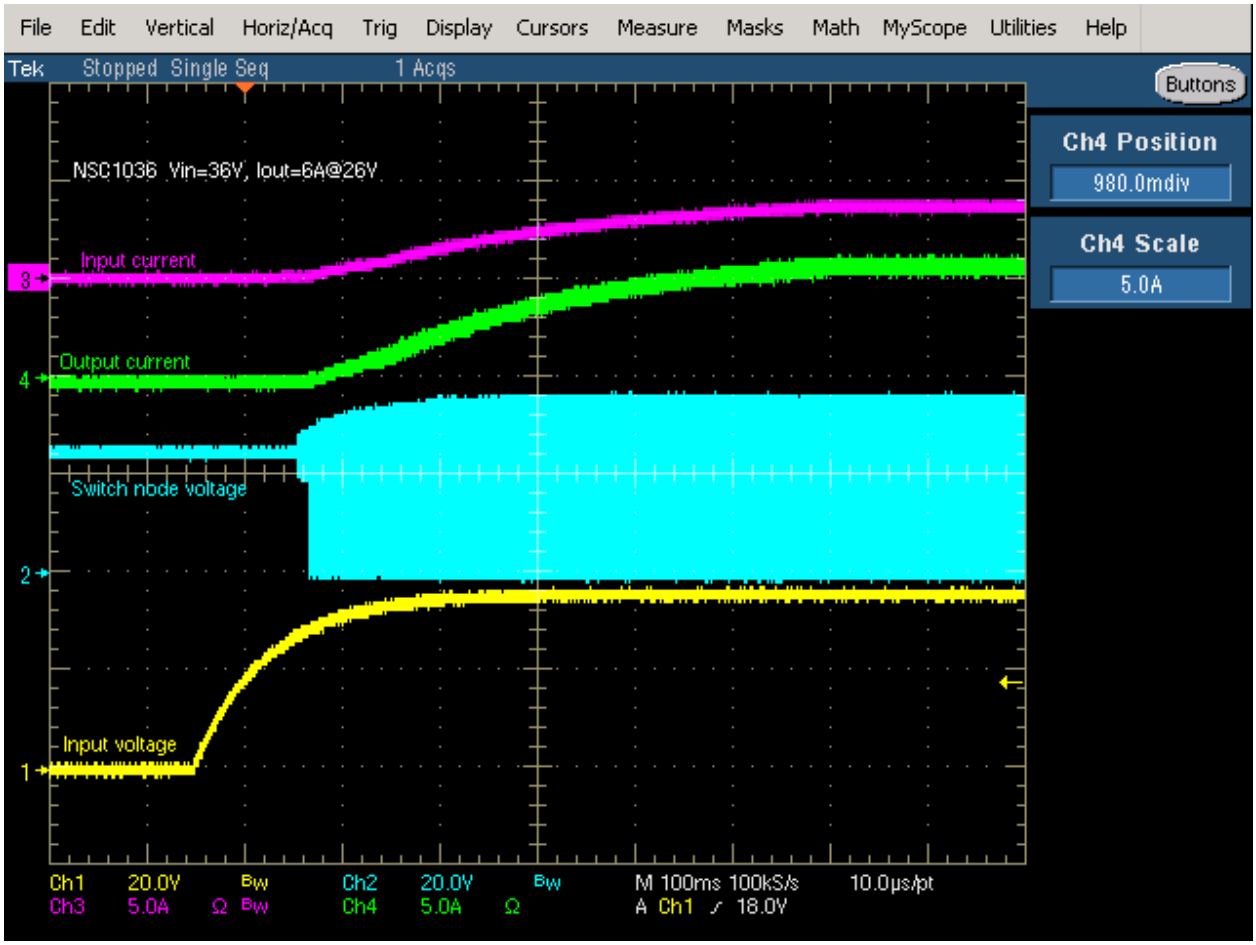
PMP7757 is a non-synchronous buck controller with 32V to 36V DC input and 29.2V@ 6A output. It has a discrete startup delay (soft start) circuit as well as a discrete over voltage protection circuit.

Some of the applications are:

- LED driver
- Constant Current Source
- Automotive Lighting
- General Illumination
- Industrial Lighting

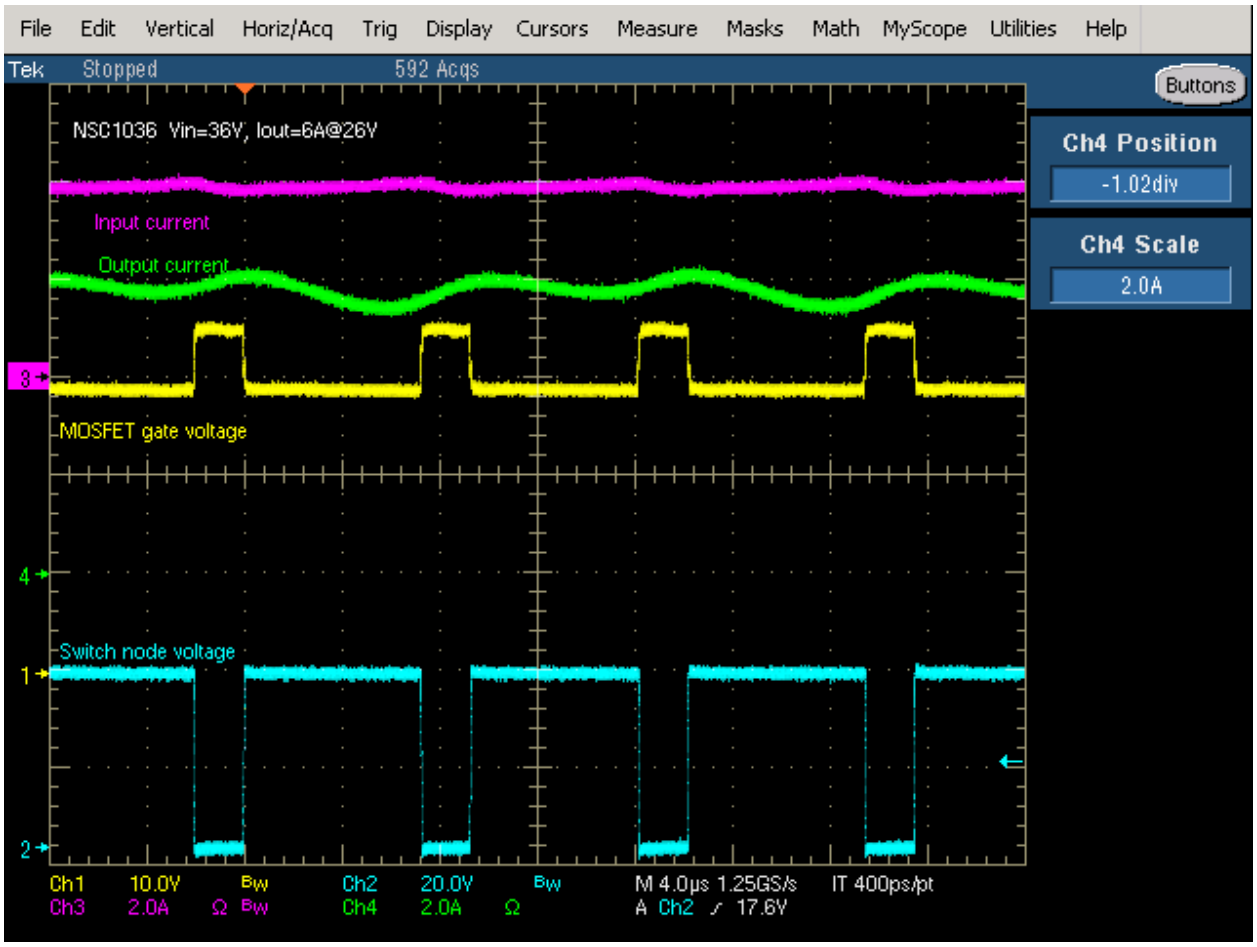
2.0 Waveforms

2.1 Startup voltages and currents for Vin = 36V



Input voltage
Switch node voltage
Input current
Output current

2.2 Switching voltages and currents for Vin = 36V



- MOSFET gate voltage
- Switch node voltage
- Input current
- Output current

3.0 Efficiency results

Vin (V)	Iin (A)	Vout (V)	Iout (A)	Efficiency
33.95	4.96	25.68	6.09	0.929
35.93	4.70	26.02	6.04	0.930
37.99	4.50	26.30	6.01	0.925

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