Test Data
For PMP7916
2/15/2013

Test SPECIFICATIONS

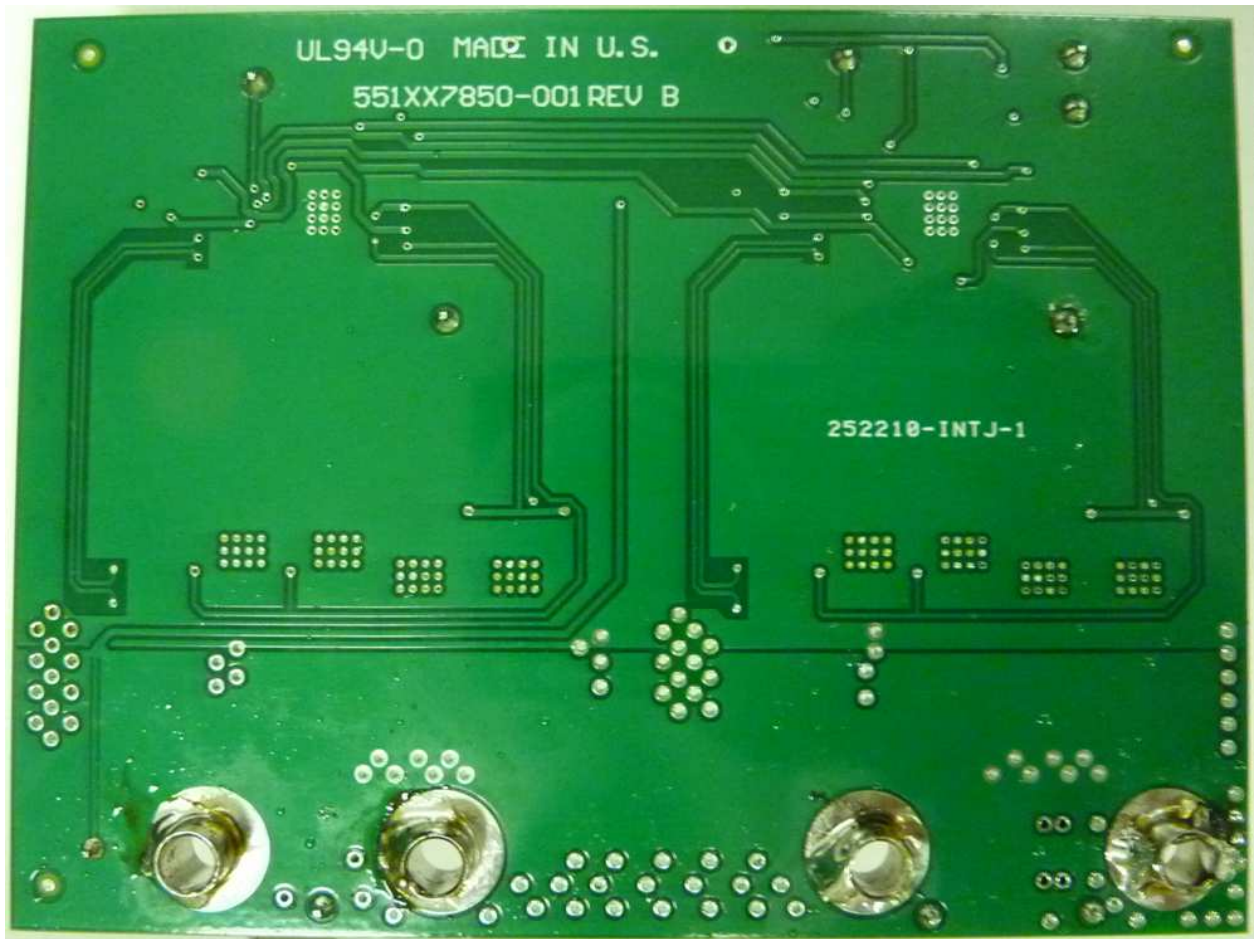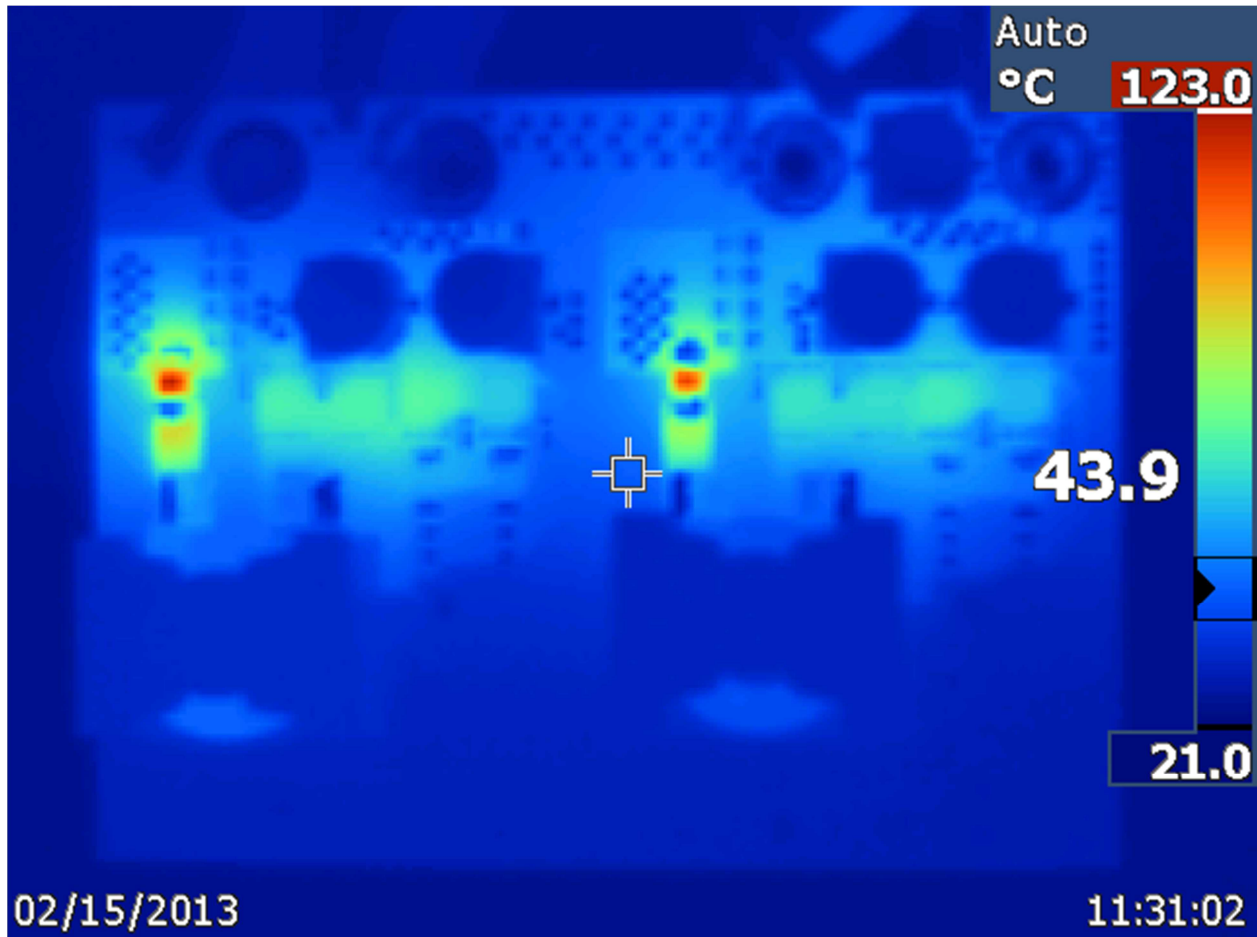| Vin	6V
Vout	12V
Iout	42A Max

FABRICATION

Board Dimensions: 4" x 3"
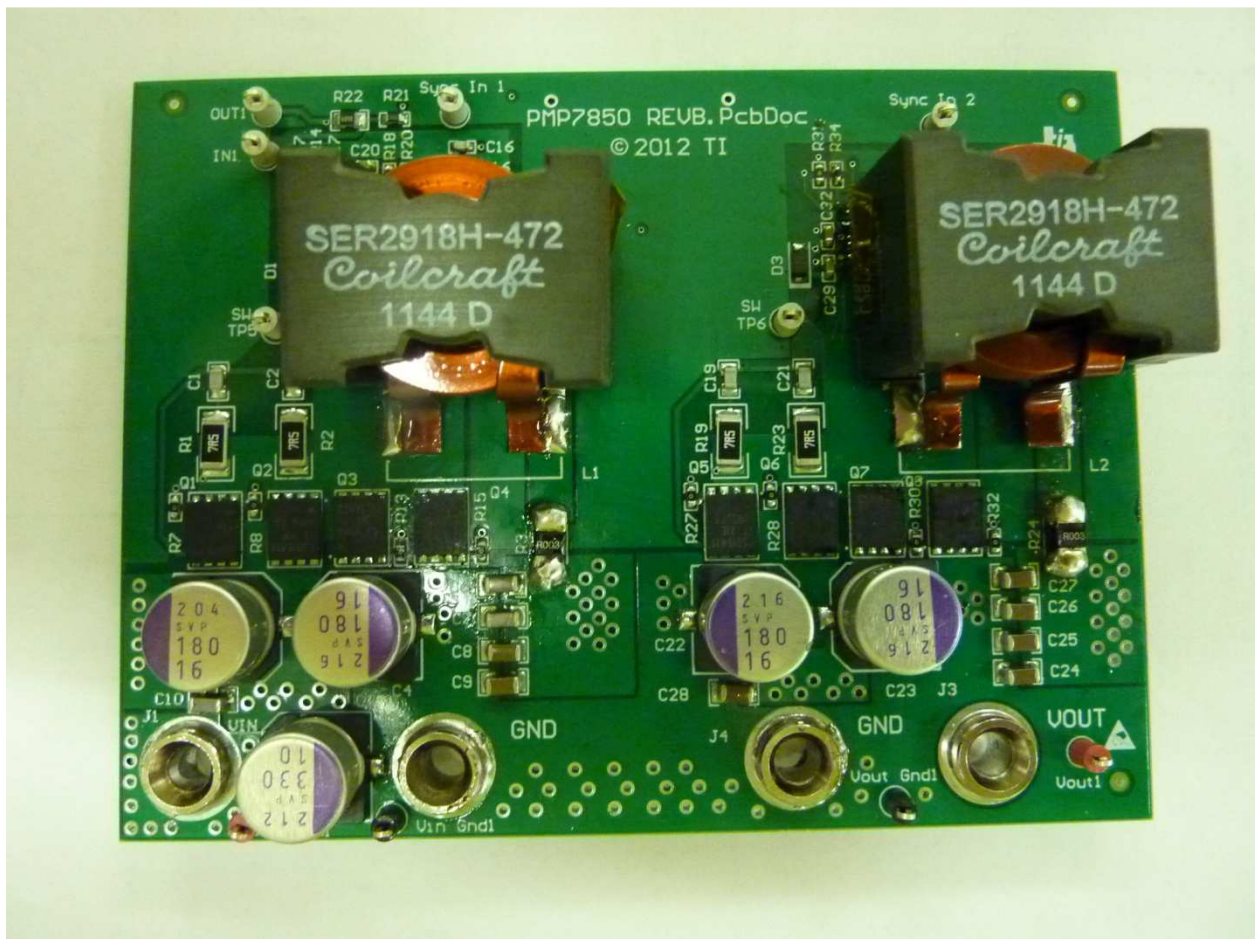
Top Side

Bottom Side

Thermal Data

Infrared Thermal Image taken after running at 42A output load for 5 seconds – *Recommend larger Rsense Resistors. Also, this board has 1oz of copper on outer layers and 0.5oz of copper on inner layers (2). Increasing copper weight will help thermal temp rise time.*
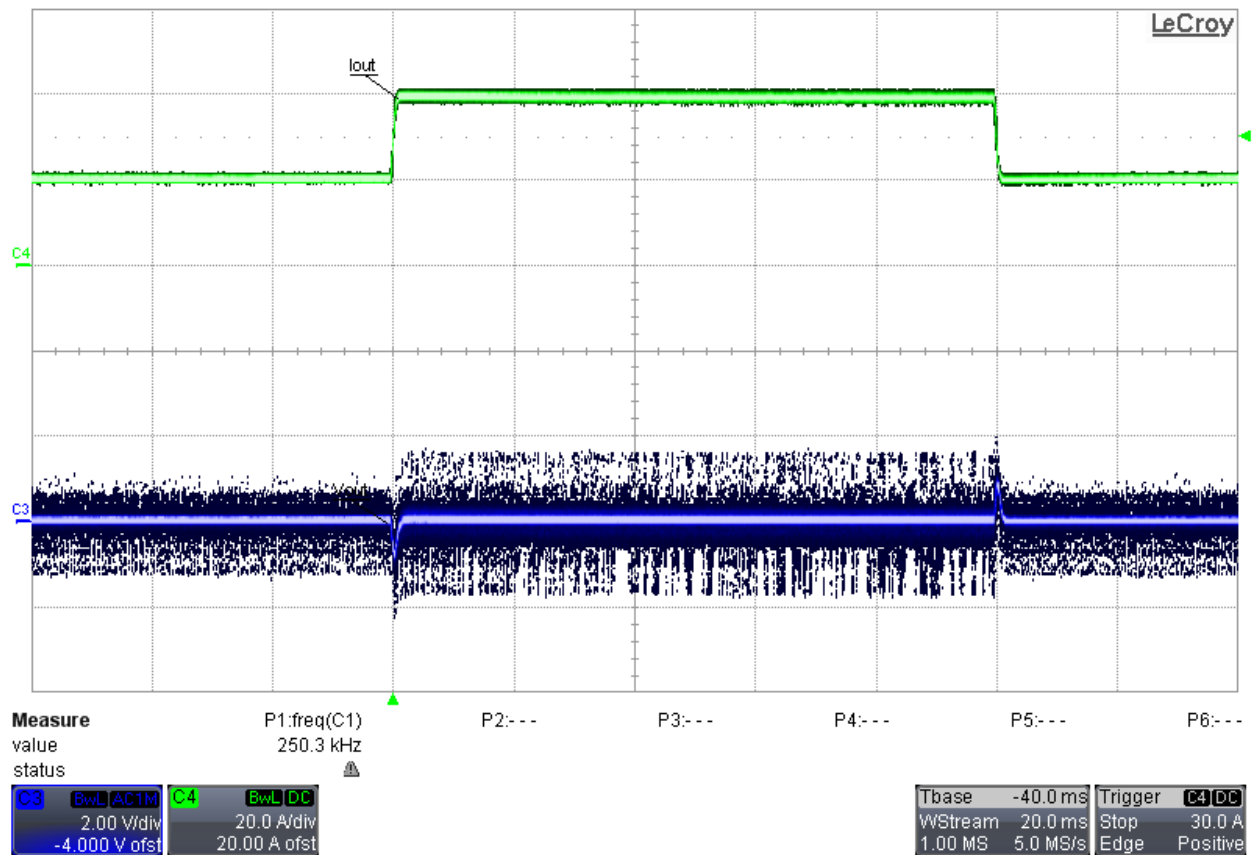
TYPICAL PERFORMANCE

EFFICIENCY

Vin (V)	Iin (A)	Vout (V)	Iout (A)	Pin (W)	Pout (W)	Efficiency (%)
5.9864	89.776	11.8197	41.172	537.44	486.64	90.5

CURRENT SHARING PERFORMANCE

Current Sharing = 45.5A   +/- 5.5%

Waveforms

Load Transient Response

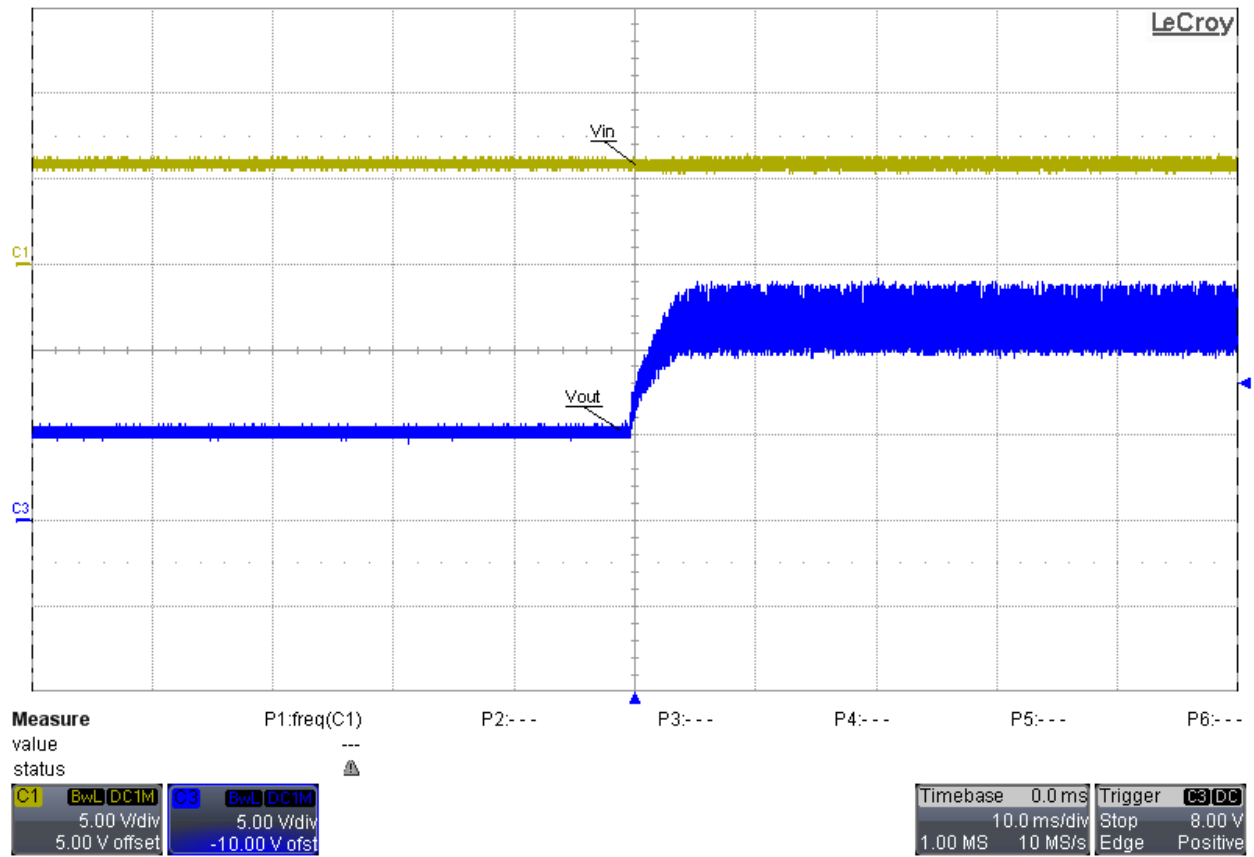**Transient Response at 20A-to-40A Load Step**

Output Voltage Ripple and Switch Node Voltage
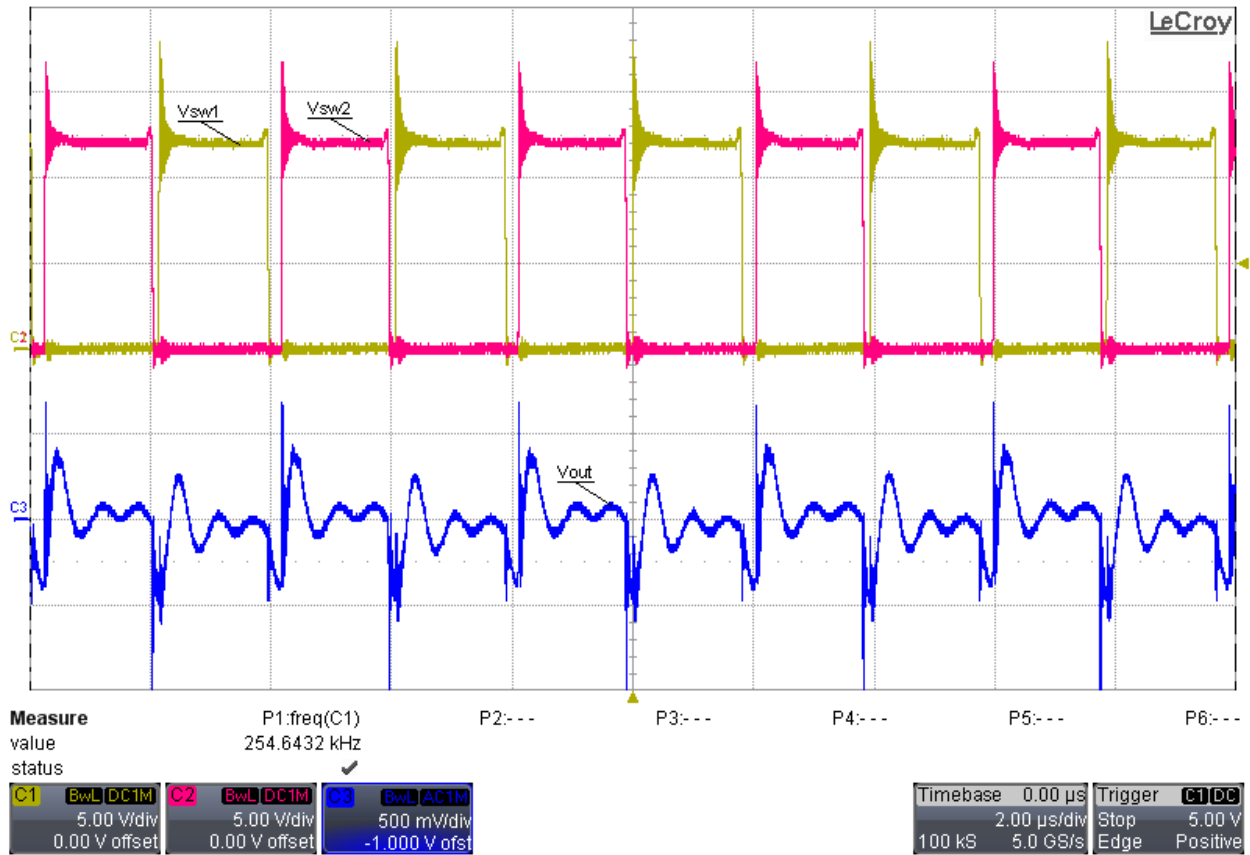
Output Voltage Ripple and Switch Node Voltage at 6Vin 42A load (Vripple ≈ 800mVp-p) – *Recommend more Cout for lower ripple content.*

Startup
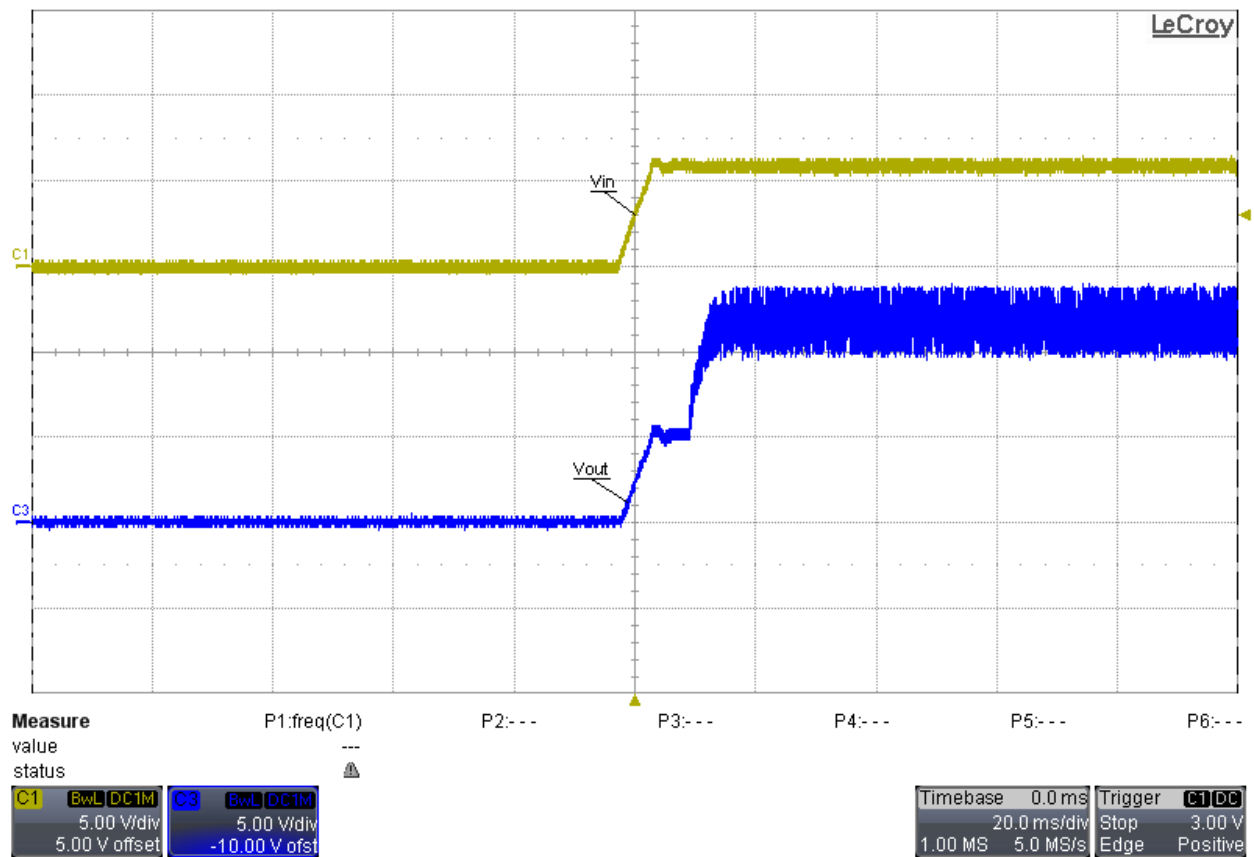
Startup into 42A Load (6Vin)

Startup into 42A Load with UVLO-pin control via N-CH MOSFET (6Vin)

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