Test Data
For PMP7851
08/10/2012
Power specification

Vin min = 30V
Vin max = 60V
Vout = 50V
IOut = 3A Max
Fsw = 300kHz

Photo
Top Side

Standard 2 switch EVM of the LM5118 was modified to meet the power specifications as stated above.
# Efficiency Data

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<th>Iout</th>
<th>Pin</th>
<th>Pout</th>
<th>Ploss</th>
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Waveforms

Ch2, Vout

Ch4, I in

Ch 1 Switch Node

Start Up Full Load 60V in, full load out.

Start Up Full Load 48V in, full load out.
Start Up Full Load 30V in, full load out.

48V in VSwitch Full load 3A out

Transient Response Tests – New to Rev 3 modifications.

Transient Response 30V in 0 to 0.75A 1000mA/us, slew rate
Transient Response 30V in 0.75A to 1.5A 1000mA/us, slew rate

Transient Response 30V in 1.5A to 2.25A 1000mA/us, slew rate

Transient Response 30V in 2.25A to 3A 1000mA/us, slew rate
Transient Response 48V in 0 to 0.75A 1000mA/us, slew rate

Transient Response 48V in 0.75A to 1.5A 1000mA/us, slew rate

Transient Response 48V in 1.5A to 2.25A 1000mA/us, slew rate
Transmit Response 48V in 2.25A to 3A 1000mA/us, slew rate

Transmit Response 60V in 0 to 0.75A 1000mA/us, slew rate

Transmit Response 60V in 0.75A to 1.5A 1000mA/us, slew rate
Transient Response 60V in 1.5A to 2.25A 1000mA/us, slew rate

Transient Response 60V in 2.25A to 3A 1000mA/us, slew rate
Short Circuit Tests

Ch 2, Vout

Ch4 Iout

Ch1 Switch Node

Short Circuit protection 60V in

Short Circuit Protection 30V in
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