

# Test Data For PMP7988 6/28/2013



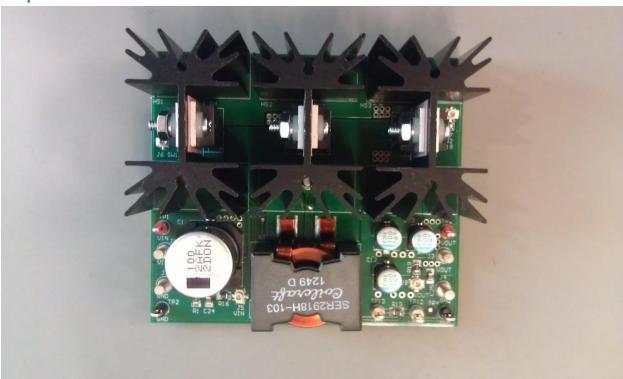


Vin	12V Nominal (8V to 16V)
Vout	12V
lout Max	6A
Fsw	100 kHz

## **FABRICATION**

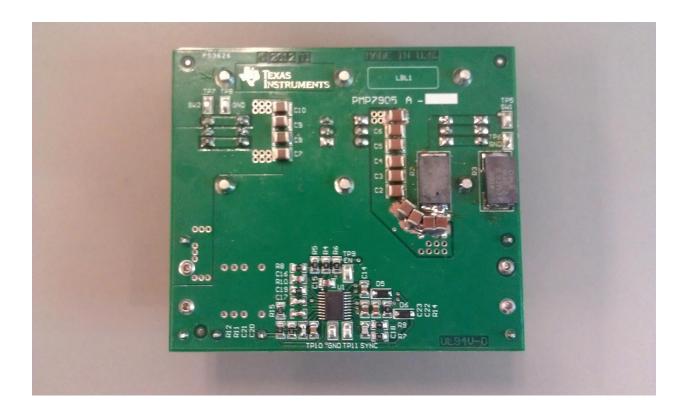
Board Dimensions: 2.87" X 3.25"

# Top Side





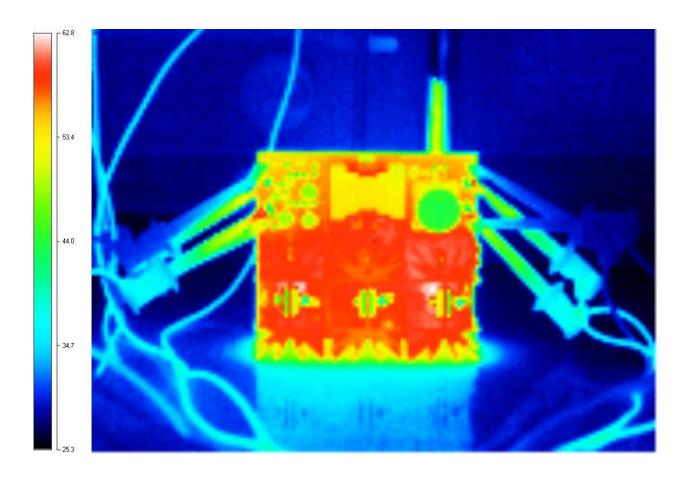
## **Bottom Side**





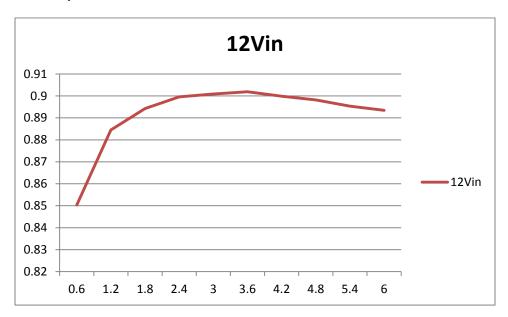
## Thermal Image.

Steady State Temp - 12V in, 12V out at a load of 6A.





### **Efficiency Curve**



## **Efficiency Curve Data**

Vin	lin	Vout	lout	Pin	Pout	EFF
12	0.698	11.87	0.6	8.376	7.122	0.850287
12	1.342	11.87	1.2	16.104	14.244	0.884501
12	1.991	11.87	1.8	23.892	21.366	0.894274
12	2.639	11.87	2.4	31.668	28.488	0.899583
12	3.294	11.87	3	39.528	35.61	0.90088
12	3.955	11.87	3.606	47.46	42.80322	0.90188
12	4.617	11.87	4.2	55.404	49.854	0.899827
12	5.293	11.87	4.806	63.516	57.04722	0.898155
12	5.966	11.87	5.4	71.592	64.098	0.895323
12	6.643	11.87	6	79.716	71.22	0.893422



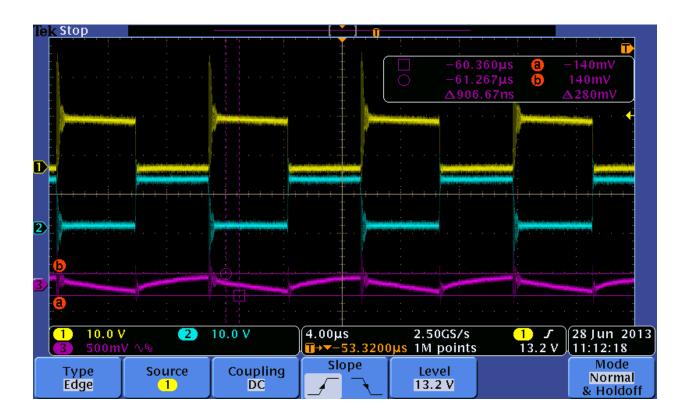
#### Waveforms

CH1 Switch node1

CH2 Switch node2

CH3 Vout

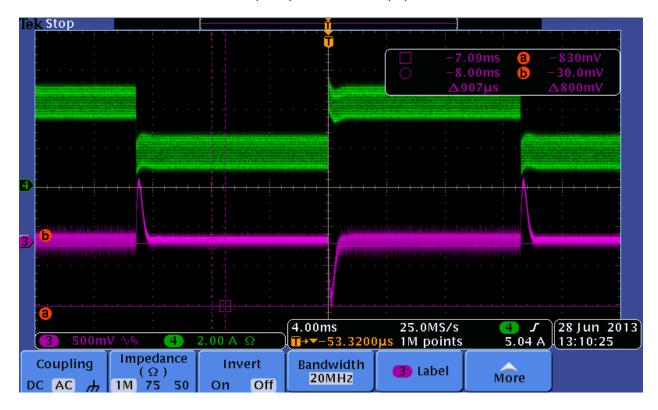
12Vin, 12V out @ 6A load current. (280mV p-p Ripple)





#### **Transient Response Test**

12V in @ 3A to 6A, 500mA/us Pulse frequency 38 Hz, 50% duty cycle, 12V out.



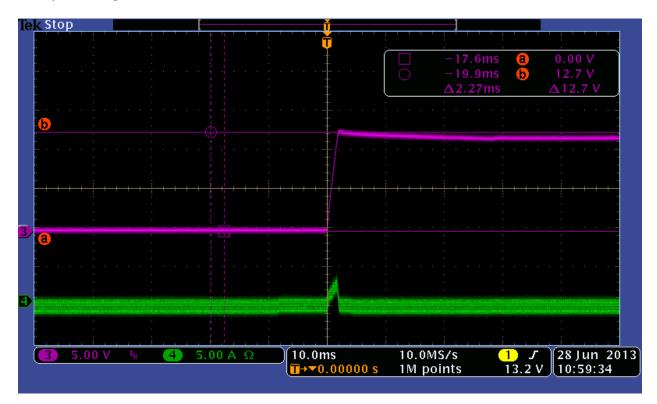


#### **Startup Test**

CH3 Vout

CH4 lin

12Vin, 12V out @ no load current.

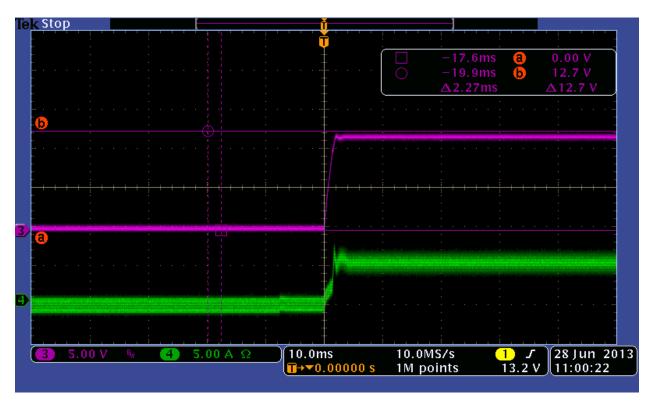




CH3 Vout

#### CH4 lin

12Vin, 12V out @ 6A load current.





#### **Short Circuit Test**

CH3 Vout

CH4 lout

Applied to board under the following conditions

12Vin, 12V out @ 6A load current.





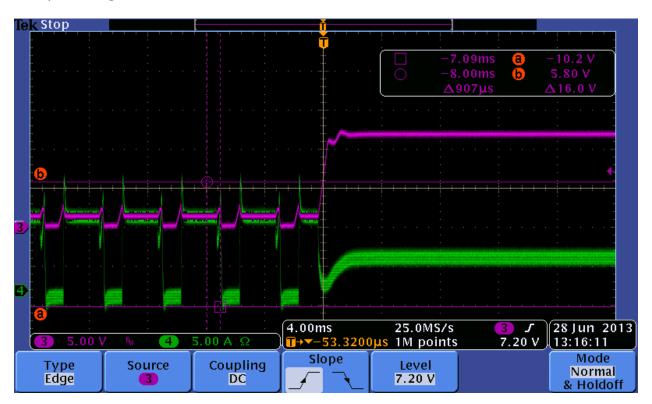
### **Short Circuit Recovery Test**

CH3 Vout

CH4 lout

Applied to board under the following conditions

12Vin, 12V out @ 6A load current.



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