Test Data
For PMP7916
2/15/2013
Test SPECIFICATIONS

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Vin</td>
<td>6V</td>
</tr>
<tr>
<td>Vout</td>
<td>12V</td>
</tr>
<tr>
<td>Iout</td>
<td>42A Max</td>
</tr>
</tbody>
</table>

FABRICATION

Board Dimensions: 4” x 3”

Top Side
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

<table>
<thead>
<tr>
<th>Vin (V)</th>
<th>Iin (A)</th>
<th>Vout (V)</th>
<th>Iout (A)</th>
<th>Pin (W)</th>
<th>Pout (W)</th>
<th>Efficiency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.9864</td>
<td>89.776</td>
<td>11.8197</td>
<td>41.172</td>
<td>537.44</td>
<td>486.64</td>
<td>90.5</td>
</tr>
</tbody>
</table>

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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