Fly-Buck™ Solution
Multiple well-regulated isolated outputs without optocoupler

Quad Output Reference Design for Industrial PLC I/O Modules
The LM5017 family of Wide V\textsubscript{IN} buck converters deliver enhanced reliability for high-voltage systems. The PMP7993.1 quad output reference design features a single-sided board design with a small solution area designed for space-constrained applications.

Key Features
- Wide V\textsubscript{IN} range up to 100 V
- Integrated HS and LS FETs
- Isolated Fly-Buck™ topology
- Primary side feedback

Target Applications
- Industrial PLC
- Smart meter
- Motor drive
- 48V telecom systems

Featured Products

<table>
<thead>
<tr>
<th>Part</th>
<th>V\textsubscript{IN} Range (V)</th>
<th>I\textsubscript{O} Range (mA)</th>
<th>Package</th>
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<tbody>
<tr>
<td>LM5017</td>
<td>9-100</td>
<td>600</td>
<td>SO-8, WSON</td>
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<td>LM5018</td>
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<td>300</td>
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For samples and more information, please visit:
- Wide V\textsubscript{IN} Products: ti.com/widevin
- LM5017 Details: ti.com/LM5017
- Reference Design Information: ti.com/PMP7993
**Flybuck Transformers for Texas Instruments LM5017**

### Series Common Characteristics
- Low cost and high efficiency
- Operating temp: -40° to +125°C
- Dielectric withstand voltage of 1500V, for 1 minute
- Excellent leakage inductance and interwinding capacitance performance

### 750313995 Flybuck Transformer
- Quad output: +/-15V, +/-5V
- EP13 SMD

### Electrical Properties

<table>
<thead>
<tr>
<th>Order Code</th>
<th>Package Size</th>
<th>U_{in} (V)</th>
<th>L (mH)</th>
<th>I_{sat} (A)</th>
<th>N_{pri} : N_{sec} : N_{aux}</th>
<th>f_{switch} (kHz)</th>
<th>U_{out1} (V)</th>
<th>I_{01} (A)</th>
<th>U_{out2} (V)</th>
<th>I_{02} (A)</th>
<th>U_{AUX} (V)</th>
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<td>1.5</td>
<td>1.5 : 1 : 2</td>
<td>300-600</td>
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<td>0.10</td>
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<td>0.10</td>
<td>15</td>
<td>0.05</td>
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</table>

### 750314225 Flybuck Transformer
- Dual output: +/-5V
- EP10 SMD

### Electrical Properties

<table>
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<tr>
<th>Order Code</th>
<th>Package Size</th>
<th>U_{in} (V)</th>
<th>L (mH)</th>
<th>I_{sat} (A)</th>
<th>N_{pri} : N_{sec} : N_{aux}</th>
<th>f_{switch} (kHz)</th>
<th>U_{out1} (V)</th>
<th>I_{01} (A)</th>
<th>U_{out2} (V)</th>
<th>I_{02} (A)</th>
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<td>0.25</td>
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### 750314226 Flybuck Transformer
- Dual output: +/-15V
- EP10 SMD

### Electrical Properties

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<th>Order Code</th>
<th>Package Size</th>
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<th>L (mH)</th>
<th>I_{sat} (A)</th>
<th>N_{pri} : N_{sec} : N_{aux}</th>
<th>f_{switch} (kHz)</th>
<th>U_{out1} (V)</th>
<th>I_{01} (A)</th>
<th>U_{out2} (V)</th>
<th>I_{02} (A)</th>
<th>U_{AUX} (V)</th>
<th>U_{T} (kV)</th>
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<tbody>
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<td>EP10</td>
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</table>

### Applications
- Industrial controls
- Isolated low power drivers & regulators
- Programmable Logic Circuits, Smart e-meters
- Bias power supplies for gate drives and op-amps
- Isolated interface power: RS-422, RS-485, CAN
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