FEATURES

Connectors
• 1 screw connector for the source + 2 screw connectors for AC input signal
• 1 screw connector + 1 JST connector for the storage element
• 1 screw connector for the application supply

Configuration
• 6 jumpers SRC_LVL_CFG[x] to define the source voltage regulation
• 4 jumpers STO_CFG[x] to define the storage element protection levels
• 4 resistors footprint related to the custom mode (STO_CFG[3:0]=LHHH)
• 1 jumper to set the dual-cell supercapacitor BAL feature
• 2 jumpers to enable the different modes
• 2 jumpers to enable the application output supply
• 1 jumper to select the rectifier

Size
• 79mm x 49mm
• 4 x M2.5 Mounting holes

SUPPORT PCB

BOM around the AEM00300

<table>
<thead>
<tr>
<th>Designator</th>
<th>Description</th>
<th>Quantity</th>
<th>Manufacturer</th>
<th>Link</th>
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</thead>
<tbody>
<tr>
<td>UI</td>
<td>AEM00300 - Symbol QFN 28-pin</td>
<td>1</td>
<td>e-peas</td>
<td>order at <a href="mailto:sales@e-peas.com">sales@e-peas.com</a></td>
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<tr>
<td>LDCDC</td>
<td>Power Inductor 10µf - 1.76A</td>
<td>1</td>
<td>Murata</td>
<td>DEE250010-300M</td>
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<tr>
<td>CPF</td>
<td>Ceramic Cap 10µf, 6.3V, 20%, XSR 0402</td>
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<td>GRM15SR010163ME15</td>
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<td>CSRC</td>
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<td>CSTO [optional]</td>
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<td>TDK</td>
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Footprint & Symbol: Information available in the datasheet
STEP 1: AEM00300 Configuration


- **BAL option:** Select “ToCn” for dual-cells supercapacitor and “GND” for any other storage element

- **Configuration mode:** EN_HP – EN_STO_CH
  Connect to H for enabling the feature, connect to L for disabling the feature

- **External output supply:** Connect both jumper at the APP_EN_AEM and STO_APP headers to enable the APP output supply.
**STEP 2:** Connect the storage element

**STEP 3:** Connect the harvester

- **Internal Boost efficiency Vs. input voltage in Low Power mode:**

  ![Graph](image1.png)

- **Internal Boost efficiency Vs. input voltage in High Power mode:**

  ![Graph](image2.png)

**STEP 4:** Check the status

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Logic Level</th>
<th>Low</th>
<th>High</th>
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<tr>
<td>ST_STA</td>
<td>Logic output levels on the status STO pin</td>
<td>GND</td>
<td>V_STA</td>
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