AEM10330
Quick Start Guide EVK

FEATURES

Connectors
• 1 screw connector for the Photovoltaic Cell
• 1 screw connector + 1 JST connector for the Storage Element
• 1 screw connector for LOAD
• 1 screw connector for RZMPP

Configuration
• 3 jumpers R_MPP[x] to define the MPP ratio linked to the harvester technology
• 2 jumper T_MPP[x] to define the MPP timing
• 4 jumpers STO_CFG[x] to define the storage element protection levels
• 3 jumper LOAD_CFG[x] to define the LOAD voltage
• 4 resistors footprint related to the custom mode (STO_CFG[3:0]=LHHH)
• 1 jumper to set the dual cell supercapacitor BAL feature
• 5 jumpers to enable the different modes

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

SUPPORT PCB

BOM around the AEM10330

Footprint & Symbol: Informations available on the datasheet
STEP 1: AEM10330 Configuration

- **MPP timing**: $T_{MPP[0]} - T_{MPP[1]}

- **MPP ratio**: $R_{MPP[0]} - R_{MPP[1]} - R_{MPP[2]}


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

- **Configuration mode**: EN_HP – STO_PRIO – EN_STO_FT – EN_STO_CH – EN_SLEEP
  Connect to H for enabling the feature, connect to L for disabling the feature
STEP 2: Connect the Storage Element

STEP 3: Connect the Load to LOAD

STEP 4: Connect the Photovoltaic Cell

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

![Graph 1](image1)

![Graph 2](image2)

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

![Graph 3](image3)

![Graph 4](image4)

STEP 5: Check the Status

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Logic Level</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logic output pins</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST_STO</td>
<td>Logic output levels on the status STO pins</td>
<td>GND</td>
<td>$V_{DD}$</td>
</tr>
<tr>
<td>ST_LOAD</td>
<td>Logic output levels on the status LOAD pins</td>
<td>GND</td>
<td>$V_{LOAD}$</td>
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<td>ST_STO_RDY</td>
<td>Logic output levels on the status STO READY pins</td>
<td>GND</td>
<td>$V_{LOAD}$</td>
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<tr>
<td>ST_STO_OVDRS</td>
<td>Logic output levels on the status BACKUP pins</td>
<td>GND</td>
<td>$V_{LOAD}$</td>
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