## Generic Energy Harvester Adapter Module for Marlow PowerStrap

<table>
<thead>
<tr>
<th>Designator</th>
<th>Description</th>
<th>Manufacturer</th>
<th>PartNumber</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>IPCB1</td>
<td>Printed Circuit Board</td>
<td>Any</td>
<td>TIDA-00246</td>
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<tr>
<td>BT1</td>
<td>Battery, 3.95 V, Axial, TH</td>
<td>Tadiran Batteries</td>
<td>HLC-1550A/TP</td>
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<tr>
<td>C1</td>
<td>CAP, CERM, 0.15 pF, 200 V, +/- %, X7R, 0402</td>
<td>Knowles Acoustics</td>
<td>C04ULR15D-6SN-X07</td>
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<td>C2</td>
<td>CAP, CERM, 0.01µF, 50V, +/-10%, X7R, 0603</td>
<td>MuRata</td>
<td>GRM188R71H103KA01D</td>
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<tr>
<td>C3</td>
<td>CAP, CERM, 22µF, 6.3V, +/-20%, X5R, 0805</td>
<td>Taiyo Yuden</td>
<td>JMK212BJ226MG-T</td>
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<tr>
<td>C4</td>
<td>CAP, CERM, 0.1µF, 25V, +/-10%, X5R, 0603</td>
<td>AVX</td>
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<td>C5, C7</td>
<td>CAP, CERM, 4.7µF, 10V, +/-10%, X7R, 0805</td>
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<td>LMK212B7475KG-T</td>
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<td>C6</td>
<td>CAP, CERM, 10 µF, 16 V, +/-10%, X5R, 1210</td>
<td>AVX</td>
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<td>C27</td>
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<td>MuRata</td>
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<td>FID1, FID2, FID3, VT1</td>
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<td>J1, J14, J15, J17</td>
<td>Header, 2.54 mm, 2x1, Gold, TH</td>
<td>Wurth Elektronik eiSos</td>
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<td>J2, J3</td>
<td>Connector, Receptacle, 100mil, 10x2, Gold plated, TH</td>
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<td>J4, J5, J6, J7, J8, J9, J10, J11, J12, J13, J16</td>
<td>Header, 2.54 mm, 3x1, Gold, TH</td>
<td>Wurth Elektronik eiSos</td>
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<tr>
<td>L1</td>
<td>Inductor, Shielded Drum Core, Ferrite, 22 µH, 0.36 A, 0.41 ohm, SMD</td>
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<tr>
<td>L2</td>
<td>Inductor, Shielded Drum Core, Ferrite, 10 µH, 0.5 A, 0.39 ohm, SMD</td>
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<td>Q1, Q2</td>
<td>MOSFET, N/P-CH, 30 V, 1.5 A, 1.0x0.35x0.6mm</td>
<td>Texas Instruments</td>
<td>CSD17483F4T</td>
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<tr>
<td>Q3</td>
<td>MOSFET, N-CH, 12 V, 14.4 A, SON 2x2mm</td>
<td>Texas Instruments</td>
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<td>R1, R13</td>
<td>RES, 0, 5%, 0.125 W, 0805</td>
<td>Vishay-Dale</td>
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<td>R3, R10, R25</td>
<td>RES, 10.0 M, 1%, 0.25 W, 1206</td>
<td>Vishay-Dale</td>
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<tr>
<td>R4, R14</td>
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<td>R5, R16</td>
<td>RES, 4.53 M, 1%, 0.25 W, 1206</td>
<td>Vishay-Dale</td>
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<tr>
<td>R6</td>
<td>RES, 510k ohm, 5%, 0.1W, 0603</td>
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<td>R7, R8</td>
<td>RES, 6.49Meg ohm, 1%, 0.1W, 0603</td>
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<td>R9</td>
<td>RES, 5.23 M, 1%, 0.125 W, 0805</td>
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<td>R11</td>
<td>RES, 6.34Meg ohm, 1%, 0.1W, 0603</td>
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<td>R12</td>
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<td>R13</td>
<td>RES, 7.87 M, 1%, 0.25 W, 1206</td>
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<td>R20, R21</td>
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<td>U1</td>
<td>Ultra Low Power Harvester Power Management IC with Boost Charger, and Nano-Powered Buck Converter, RGR0020A</td>
<td>Texas Instruments</td>
<td>BQ25570RGRR</td>
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<td>U2</td>
<td>0.9-V to 6.5-V, Nanopower Comparator, DCK0005A</td>
<td>Texas Instruments</td>
<td>TLV3691IDCK</td>
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<td>U3</td>
<td>Nano Power Programmable Timer, DGS0010A</td>
<td>Texas Instruments</td>
<td>TPL5100DGS</td>
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<td>U5</td>
<td>Remote 16-Bit I2C and SMBus, Low-Power I/O Expander with Interrupt Output and Config Register, 1.65 to 5.5 V, -40 to 85 degC, 24-pin QFN (RTW), Green (RoHS &amp; no Sb/Br)</td>
<td>Texas Instruments</td>
<td>TCA9535RTWR</td>
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</tbody>
</table>
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