Energy Harvesting Ambient Light and Environment Sensor Node for Sub-1GHz Networks

Project Title: Designed for: Public Release

Assembly Variant: 001

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Kelly Fernandez

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Revision History

<table>
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<tr>
<th>Rev</th>
<th>ECN #</th>
<th>Approved Date</th>
<th>Approved by</th>
<th>Notes</th>
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<tbody>
<tr>
<td>E1</td>
<td>N/A</td>
<td>27 Jul 2015</td>
<td>Evan Cornell</td>
<td>Initial Release</td>
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<tr>
<td>E2</td>
<td>N/A</td>
<td>28 Sep 2015</td>
<td>Evan Cornell</td>
<td>Review resistor values, Solar Cells in Series</td>
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<tr>
<td>E3</td>
<td>N/A</td>
<td>14 Oct 2015</td>
<td>Mark Krepp</td>
<td>Unpopulate R9 and R11</td>
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<td>E4</td>
<td>N/A</td>
<td>12 May 2016</td>
<td>Adam Yager</td>
<td>Replace HDC1000 with HDC1010</td>
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</tbody>
</table>

CR2032 Coin Cell Backup Battery

Solar Cell

bq25505 (Nano-power management)

Storage Capacitor (1200 μF)

CSD75208W1015 (Load switch)

CC1310 (Sub-1 GHz Wireless MCU)

HDC1010 (Humidity & Temp.)

OPT3001 (Ambient Light)
Energy Harvesting Power Management
These assemblies must comply with workplace standards IPC-A-610 Class 2, unless otherwise specified.

Assembly Note ZZ2
ESD sensitive. ESD precautions shall be observed.

Assembly Note ZZ3
These assemblies must be clean and free from flux and all contaminants. Use of no clean flux is not acceptable.

Assembly Note ZZ4
These assemblies must comply with workplace standards IPC-A-610 Class 2, unless otherwise specified.
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