Wireless PIR Motion Detector w/ BLE Connectivity

Project Title:

Designed for:

Assembly Variant:

001

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Revision History

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<td>E1</td>
<td>N/A</td>
<td>29 Jan 2016</td>
<td>Gustavo Martinez</td>
<td>Initial Release</td>
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Contact:

Version control disabled

SVN Rev:

ISE4047

Number:

Rev:

E1

TID #:

TIDA-00759

Orderable:

N/A

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Diagram:

- PIR
- Coin Cell Battery (CR2032)
- LPV521 (Amplified Bandpass Filter)
- TLV3691 (Window Comparator)
- CC2650 (ARM + 2.4 GHz)
- Vbatt
- Interrupt
Wireless MCU Bypass Capacitors & DC-DC Passives

Wireless MCU

JTAG Programming Interface

User and Reset Switches

RF, N is used for RX biasing. L3 may be removed at the cost of 1dB degraded sensitivity.

Place L2 and C4 close to U1, Pin 18.

Inverted F antenna is used for RX in outdoor applications. L2 may be removed at the cost of 0.5dB degraded sensitivity.

Place R4 and R5 as close to GND as possible.

Inverted F antenna in indoor applications. No external matching components required.
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Assembly Note
ZZ1
These assemblies are ESD sensitive, ESD precautions shall be observed.

Assembly Note
ZZ2
These assemblies must be clean and free from flux and all contaminants. Use of no clean flux is not acceptable.

Assembly Note
ZZ3
These assemblies must comply with workmanship standards IPC-A-610 Class 2, unless otherwise specified.

Assembly Note
ZZ4
After verifying lens of A1 is clean and undistorted, snap cover H9 over sensor A1 during final hardware assembly.
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