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ISM43362-L77 EVB
Hardware User's Guide

1   General Description

The Inventek ISM43362-L36 is an 802.11 b/g/n WiFi Radio SiP with on board antenna or optional external antenna with a U.FL connector. It is designed for embedded wireless solutions and offers a cost-effective high performance Broadcom radio device (BCM43362) packaged in a 36 pin LGA (24.4mm x 15.3 mm).

The ISM43362-L36-EVB is a radio only solution that is ideal for integration with a single board computer running Linux.   The evaluation board plugs directly into an SDIO/MicroSD slot and can be used with an ARM or x86 host processor running Linux Kernel 3.10 or later. Inventek Systems provides Wi-Fi and Bluetooth drivers for several different platforms.

Hardware Features:

- Uses Broadcom BCM43362 802.11 b/g/n Wi-Fi Radio
- 2.4 GHz etched PCB antenna
    - U.FL Connector for external antenna
- Host interfaces:
    - SDIO
    - SPI
- Input Power: 3.3 V
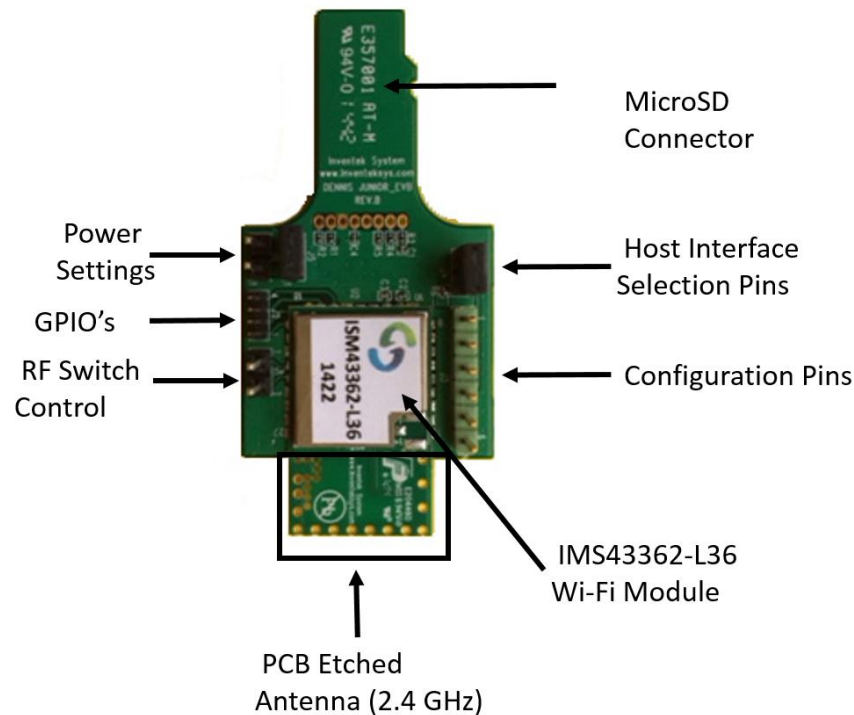- FCC/IC and CE certification

2   Part Number Detail Description

ISM43362-L36-EVB	Wi-Fi 802.11 b/g/n	On board Antenna

3   Additional Documentation

- ISM43362-L36 Functional Specification
- ISM43362-L36_EVB_iMX6_Quick_Start_Guide

4   ISM43362-L36-EVB Architecture

Power Settings

GPIO's

RF Switch Control

MicroSD Connector

Host Interface Selection Pins

Configuration Pins

IMS43362-L36 Wi-Fi Module

PCB Etched Antenna (2.4 GHz)

** **Note**: Pin labels can be seen on the bottom of the board.

4.1   Powering the Board

The 3.3V input power to the board is labeled VDD. This power can be supplied though the SDIO Connector or via an external supply.

4.1.1   Power Though SDIO

- Place a jumper on J5, to connect VDD to the SDIO voltage source.

4.1.2   External Power

- J6 is used to connect an external supply. Pin 1 is VDD and Pin 2 is GND.

4.2 GPIO Description:

Pin Name	Function
GPIO0*	Host interface strapping option. GND to Select SDIO Mode.
GPIO1/ BTCX_FREQ	General GPIO or Bluetooth Coexistence Interface
GPIO3/ BTCX_TXCONF	
GPIO4/ BTCX_STATUS	
GPIO5/ BTCX_RF_ACTIVE	

***Note**: Place a Jumper on J4 so ground GPIO0 and select SDIO mode.

4.3 Reset

Full power down of the radio occurs when WL_RST_N is low. By Default, WL_RST_N (J3 Pin 5) is low, and it must be tied to VDD or controlled by the host processor. Connect J3 Pin 5 to J6 Pin1 to turn the radio on.

5 Schematic
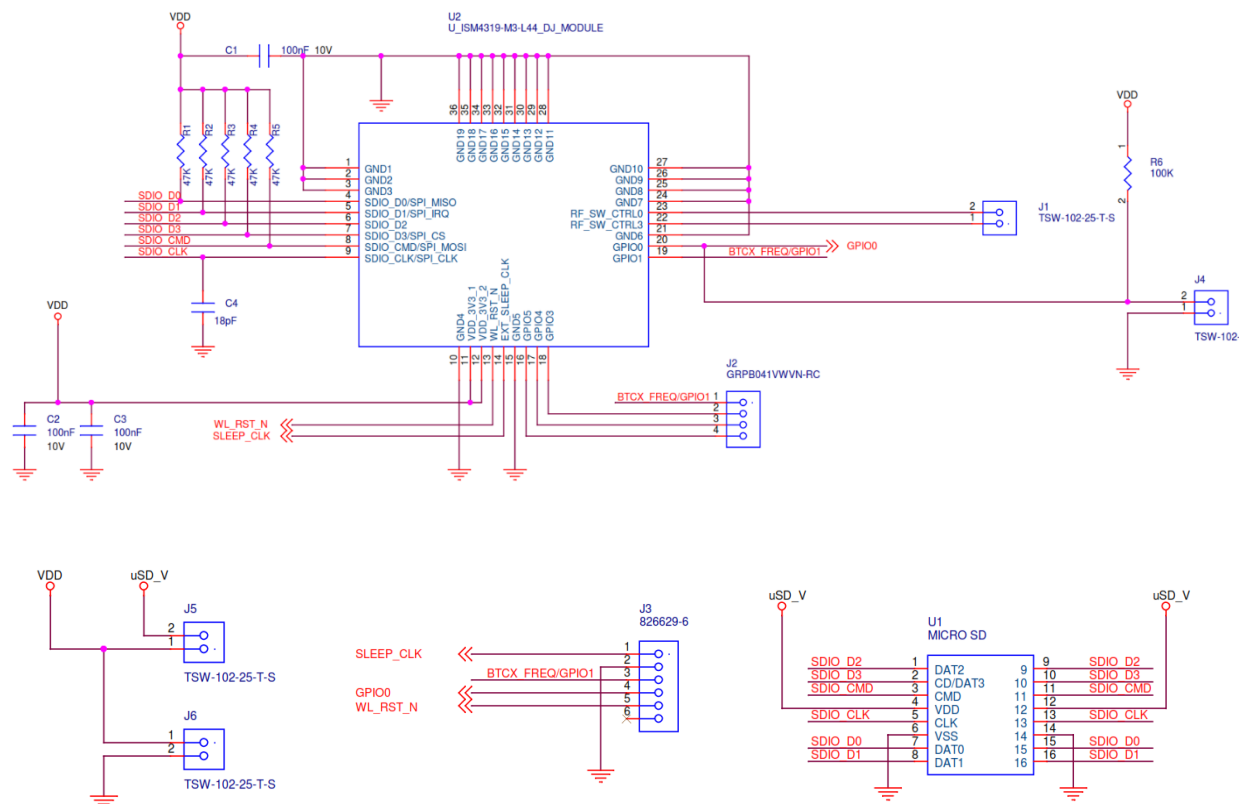
6 Revision Control

Document : ISM4334xC-Shield	Wi-Fi module
External Release	DOC-DS-20097

Date	Author	Revision	Comment
3/24/2016	KMT	1.0	Preliminary Release

7 CONTACT INFORMATION

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