

Application Note>

# Ayla Pin Mapping for Inventek ISM43362A Wi-Fi Module

---



Version: 1.1

Date Released: January 13, 2016

Document Number: AY006ASP0-1



---

## Copyright Statement

© 2017 Ayla Networks, Inc. All rights reserved. Do not make printed or electronic copies of this document, or parts of it, without written authority from Ayla Networks.

The information contained in this document is for the sole use of Ayla Networks personnel, authorized users of the equipment, and licensees of Ayla Networks and for no other purpose. The information contained herein is subject to change without notice.

---

## Trademarks Statement

Ayla™ and the Ayla Networks logo are registered trademarks and service marks of Ayla Networks. Other product, brand, or service names are trademarks or service marks of their respective holders. Do not make copies, show, or use trademarks or service marks without written authority from Ayla Networks.

---

## Referenced Documents

Ayla Networks does not supply all documents that are referenced in this document with the equipment. Ayla Networks reserves the right to decide which documents are supplied with products and services.

---

## Contact Information

### Ayla Networks TECHNICAL SUPPORT and SALES

Contact Technical Support: <https://support.aylanetworks.com>  
or via email at [support@aylanetworks.com](mailto:support@aylanetworks.com)

Contact Sales: <https://www.aylanetworks.com/company/contact-us>

### Ayla Networks REGIONAL OFFICES

#### GREATER CHINA

Shenzhen  
Room 310-311  
City University of Hong Kong  
Research Institute Building  
No. 8 Yuexing 1st Road  
High-Tech Industrial Park  
Nanshan District  
Shenzhen, China  
Phone: 0755-86581520

#### HEADQUARTERS

Silicon Valley  
4250 Burton Drive, Suite 100  
Santa Clara, CA 95054  
United States  
Phone: +1 408 830 9844  
Fax: +1 408 716 2621

#### EUROPE

London  
30 Great Guildford St  
London SE1 0HS  
United Kingdom

#### TAIWAN

Taipei  
5F No. 250 Sec. 1  
Neihu Road, Neihu District  
Taipei 11493, Taiwan

#### JAPAN

Wise Next Shin  
Yokohama, 2-5-14  
Shnyokohama, Kohokuku  
Yokohama-shi, Kanagawa-ken  
Yokohoma, 222-0033 Japan

For a Complete Contact List of Our Offices in the US, China, Europe, Taiwan, and Japan:

<https://www.aylanetworks.com/company/contact-us>

## Table of Contents

1	Introduction.....	1
1.1	Audience .....	1
1.2	Related Documentation .....	1
2	Signal Pin-outs.....	2
2.1	Additional Pins .....	2
3	Programming Pins .....	3
4	Programming Header .....	4



# 1 Introduction

This document describes the pin mapping for the Ayla features of the Inventek ISM43362A Module.

## 1.1 Audience

---

This document is intended for programmers and hardware engineers that need to connect the Inventek ISM43362A module to other hardware components. This document contains descriptions of the Ayla signals present on each of the ISM43362A pins.

## 1.2 Related Documentation

---

- Ayla Module and MCU Interface Specification (AY006MSP0)
- Ayla Setup for Inventek ISM4362 Modules (AY006MIV0)

## 2 Signal Pin-outs

The pin mapping for the Ayla Enabled Module and the associated ISM43362A module pin names and pin numbers are shown below.

Table 1 Module Pin Mapping

Ayla Signal Name	ISM43362A Pin Name	ISM43362A Module Pin	I/O	Description
SPI_SSN	ADC1/SPI_SSN	12	I/O	SPI Slave Select
SPI_SCK	ADC2/SPI_SCK	11	I/O	SPI Clock
SPI_MOSI	ADC4/SPI_MOSI	9	I/O	SPI Master Out Slave In
SPI_MISO	ADC3/SPI_MISO	10	I/O	SPI Master In Slave Out
UART_TX	TX	22	O	UART Transmit
UART_RX	RX	21	I	UART Receive
UART_CTSn	DM	19	I	UART CTS
UART_RTSn	DP	18	O	UART RTS
READY_N	RES	32	O	Module Initialized
INTR_N	RES	31	O	Interrupt output
RESET_N	RSTN	34	I	Module Reset
LINK_N	RES	30	O	ADS Link Status
WKUP	Wakeup	16	I	Wake Up Module
VDD	VDD	2, 14	PI	DC supply for Module
GND	GND	1,3,17,20,35,36,37,38,39,40,41,42,43,44	-	Ground

### 2.1 Additional Pins

Some of the additional pins on the ISM43362A module that are required for normal operation are listed below.

Table 2 Additional Module Pins

ISM43362A Pin Name	ISM43362A Module Pin	I/O	Description
VBAT	15	PI	Power supply for backup circuitry

### 3 Programming Pins

The pins on the ISM43362A module required to program and update the firmware are listed below in Table 3. These pins are optional and required only to provide the ability to perform firmware download to the module.

Table 3 Programming Module Pins

ISM43362A Pin Name	ISM43362A Module Pin
CFG1	29
CFG0	28
TDRSTN	8
TDO	7
TDI	6
TMS	4
TCK	5

## 4 Programming Header

The pins required to flash and update the module along with the recommended header configuration is shown Figure 1.

Figure 1 Programming header

RSTN	1	2	VDD
TMS	3	4	RXD
GND	5	6	TXD
TCK	7	8	GND





4250 Burton Drive, Santa Clara, CA 95054

Phone: +1 408 830 9844

Fax: +1 408 716 2621