Application Note

Ayla Pin Mapping for Azurewave AW-CU300 Wi-Fi Module

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Revision History

Revision	Date	Author	Change Description
1	2015/Nov/10	PGandhi/LBoling	Initial document
2	2015/Nov/23	LBoling	Added 'A' to module name
3	2015/Dec/28	PGandhi	Updated Programming header
4	2016/Jan/19	PGandhi	Updated pin names

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1 Introduction

This document describes pin mapping for the Ayla Enabled Module to the pins on the Azurewave AW-CU300 A Wi-Fi Module.

1.1 Audience

This document is intended for module manufacturers who want to configure Ayla Devices.

Related Documentation

- Ayla Module/MCU Interface Specification (AY006MSP3)
- Ayla Setup for Azurewave AW-CU300A Wi-Fi (AY006AWA6)

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2 Signal pin-outs

The pin mapping for the Ayla Enabled Module and the associated AW-CU300 AW-CU300A module pin names, pin numbers are shown below in Table 1.

Table 1 Module Pin Mapping

Ayla Signal Name	Azurewave AW-CU300A Pin Name	Azurewave AW-CU300A Module Pin	I/O	Description
UART_TX	GPIO_48	G1	O	UART Transmit
UART_RX	GPIO_49	G2	I	UART Receive
UART_CTS	GPIO_46	F1	I	UART CTS
UART_RTS	GPIO_47	F2	O	UART RTS
READY_N	GPIO_43	E8	O	Module Initialized
RESET_N	RESETN	K7	I/O	Module Reset
LINK_N	GPIO_39	E2	O	ADS Link Status
VDD	VDD	E7 & D7	PI	DC supply for Module
GND	GND	A1, A2, A7, A8, B1, B2, B7, B8, C1, C7, D1, D8, F4, F5, G3, G4, G5, G6, H3, H4, H5, H6, J3, J4, J5, J6, K3, K4, K5, K6, L1, L2, L3, L4, L5, L6, L8	-	Ground
FLOAT	FLOATING	L7	-	Do Not Connect

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2.1 Additional pins

Some of the additional pins on the Azurewave AW-CU300A module required for normal operation are listed below in Table 2.

Table 2 Additional Module Pins

Azurewave AW-CU300A Pin Name	Azurewave AW-CU300A Module Pin	I/O	Description
GPIO_25	G7	I	32KHz CLK Input
GPIO_26	G8	O	32KHz CLK Output

Programming Pins

The pins on the AW-CU300 module required to program and update the firmware are listed below. These pins are optional and required only to provide the ability to perform firmware download to the module.

Table 3 Programming Module Pins

Ayla Signal Name	Azurewave AW-CU300A Pin Name	Azurewave AW-CU300A Module Pin
UART_TX	GPIO_2	J1
UART_RX	GPIO_3	J2
JTAG TDO	GPIO_6	K8
JTAG TCK	GPIO_7	H8
JTAG TMS	GPIO_8	H7
JTAG TDI	GPIO_9	J8
JTAG TRST	GPIO_10	J7

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4 Programming Header

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

Figure 1 Programming header

JTAG TRST	1	2	VDD
JTAG TDO	3	4	UART_RX
JTAG TCK	5	6	UART_TX
JTAG TDI	7	8	GND
JTAG TMS	9	10	GND

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