



AMW004-A01 Datasheet



AMW004-A01 'Hornet'

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About this Document

This document provides information for the WiConnect serial Wi-Fi application and the AMW004-A01 'Hornet' module available from ACKme Networks.

Products covered by this guide include:

- AMW004-A01 'Hornet'

Further information about WiConnect is available in the WiConnect Reference manual online at:

<http://wiconnect.ack.me>

Organization

This document is organized into the following sections:

- [Introduction](#)
- [Feature Identification](#)
- [Using WiConnect](#)
- [Ordering Information](#)
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Not Recommended for New Designs

The AMW004-A01 'Hornet' module is a through-hole module adaptor that allows the AMW004 'Wallaby' Wi-Fi module to be fitted to any board conforming to the de-facto standard 2mm pitch 2x10 pin sockets commonly used in embedded applications. The module is a self-contained low-power Wi-Fi networking module with onboard microcontroller and antenna. It comes with ACKme WiConnect firmware, providing easy manual and automated control of the module's features, straightforward and secure networking, OTA software upgrades, and access to the goHACKme IoT (Internet of Things) cloud.



**Figure 1. AMW004-A01 ‘Hornet’
Module Adapter**

For details of the AMW004 'Wallaby' module, see the ARG-AMW004 Reference Guide.

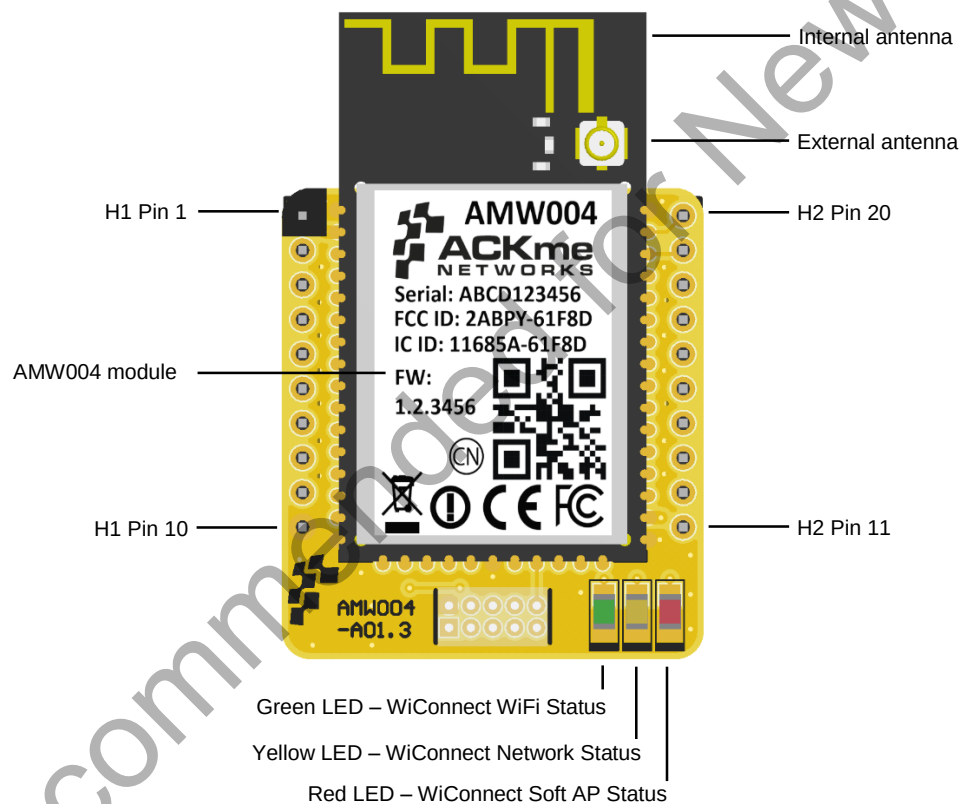
Table 1. AMW004-A01 Expansion Header Connections

Pin #	Type	Hornet	AMW004	Pin #	Type	Hornet	AMW004
1	Pwr	VDD_3V3	VDD_3V3	20	GPIO	GPIO_28	GPIO_28
2	GPIO	USART1_TX	GPIO_14	19	GPIO	GPIO_27	GPIO_27
3	GPIO	USART1_RX	GPIO_13	18		SPI_SCK	GPIO_17 ¹
4	GPIO	SPI_MISO	GPIO_19 ¹	17		SPI_CS	GPIO_20 ¹
5		RESET_N	RESET_N	16		USART1_RTS	GPIO_15
6	GPIO	GPIO_4	GPIO_26	15	GPIO	GPIO_12	GPIO_12
7	GPIO	GPIO_5	GPIO_25	14	GPIO	GPIO_24	GPIO_24 ²
8	GPIO	GPIO_6	GPIO_22	13	GPIO	GPIO_10	GPIO_0
9	GPIO	GPIO_7	GPIO_21	12		USART1_CTS	GPIO_16
10		GND	GND	11		SPI_MOSI	GPIO_18 ¹

1 Connection to AMW004 is via a 220R resistor

Table 2. AMW004-A01 Features

Feature	AMW004-A01 'Hornet'
Product Number	AMW004-A01
Module style	Pluggable module adapter
Serial Interface	4-wire UART
Power supply	3.3V


Figure 2 - AMW004-A01 Features

3 Using WiConnect

For details of using the AMW004-A01 with WiConnect, see the ARG-AMW004E Reference Guide and the WiConnect Reference Guide, available online at <http://wiconnect.ack.me>.

A number of simple and more sophisticated example applications are also provided to help you get the most out of WiConnect and the AMW004 module.

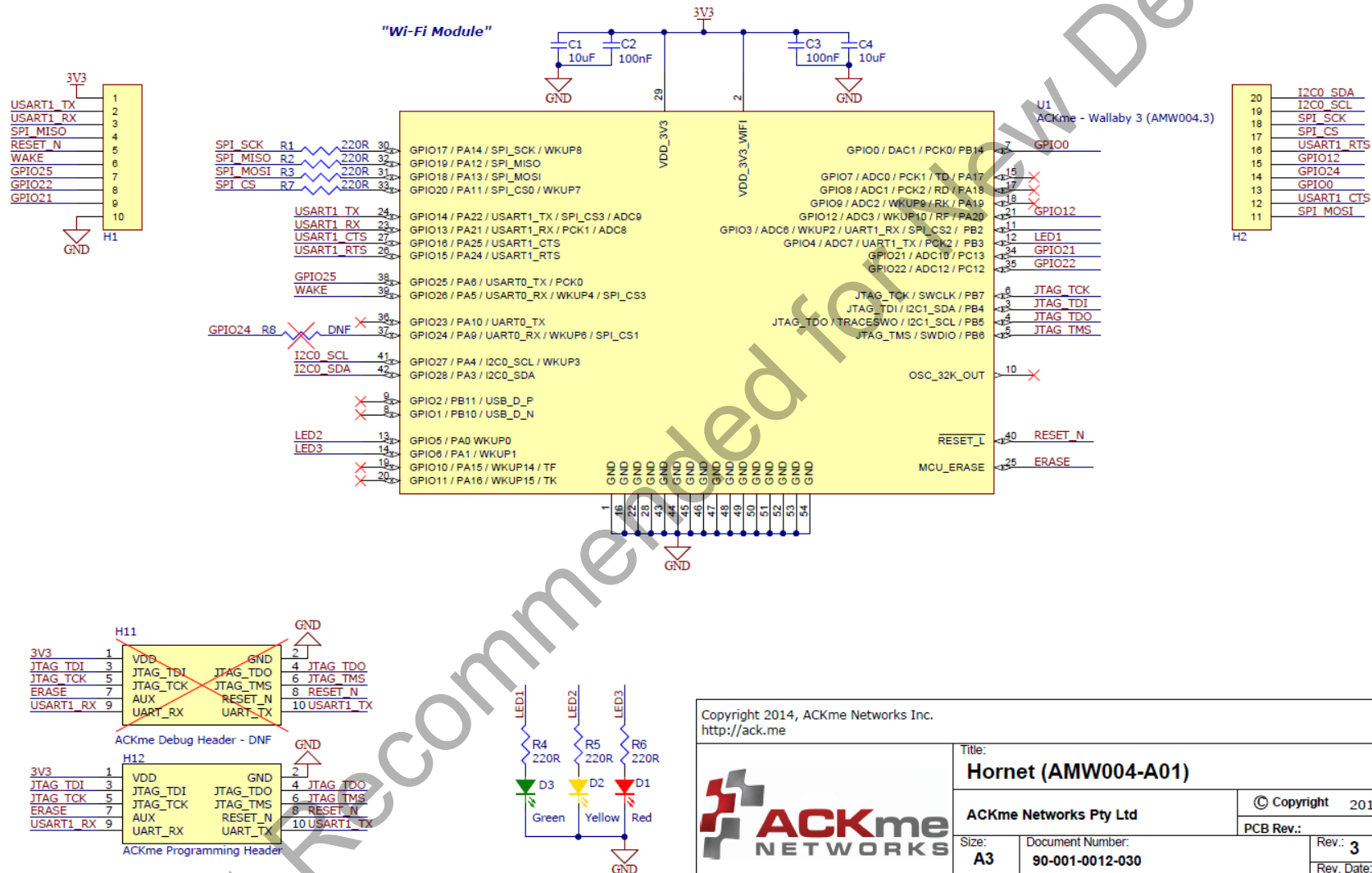
4 Ordering Information

Table 4 provides ordering information for AMW004-A01 and related evaluation boards.

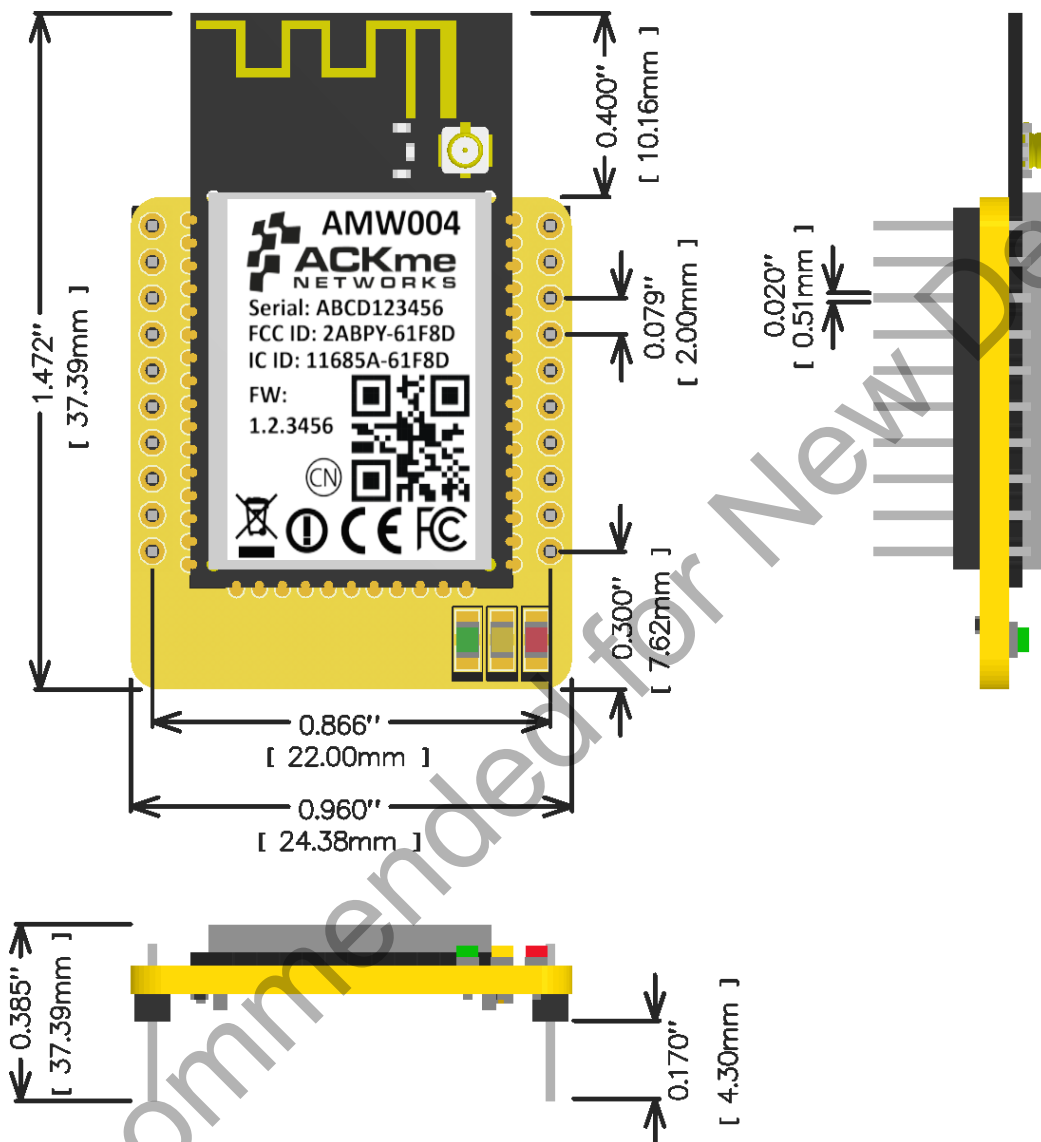
Table 3. Ordering Information

Part Number	Picture	Description
AMW004-A01 'Hornet'		Hornet module adapter. Includes AMW004 module.
AAE001		Bare bones evaluation board that takes an AMW004-A01 Hornet module adapter. Does NOT include a AMW004-A01 'Hornet' module adapter!
AMW004-E02 'Marlin'		WiConnect development and evaluation platform for the AMW004-A01 Hornet through-hole pluggable module adapter. This part number includes both the AAE001 evaluation board and the AMW004-A01 module.

5 Schematics & Mechanical Dimensions



Mechanical Dimensions for AMW004-A01 'Hornet'



6 Revision History & Glossary

6.1 Revision History

Table 4: Document Revision History

Revision	Date	Change Description
ADS-MW004-A01-100	December 4, 2014	First release

6.2 Glossary

In most cases, acronyms and abbreviations are defined on first use. A comprehensive list of acronyms and other terms used in ACKme Networks documents are provided on the ACKme Networks website at <http://ack.me/FAQs/Glossary>.

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