

# DEXATEK

## DK9169 Series Wi-Fi 802.11b/g/n Module Specification

### Revision History

This table describes the changes to the Specification.

Version	Date	Description
1.0	2017-11-10	Official Release
1.1	2017-11-13	Add PIN into Mechanical Diagram

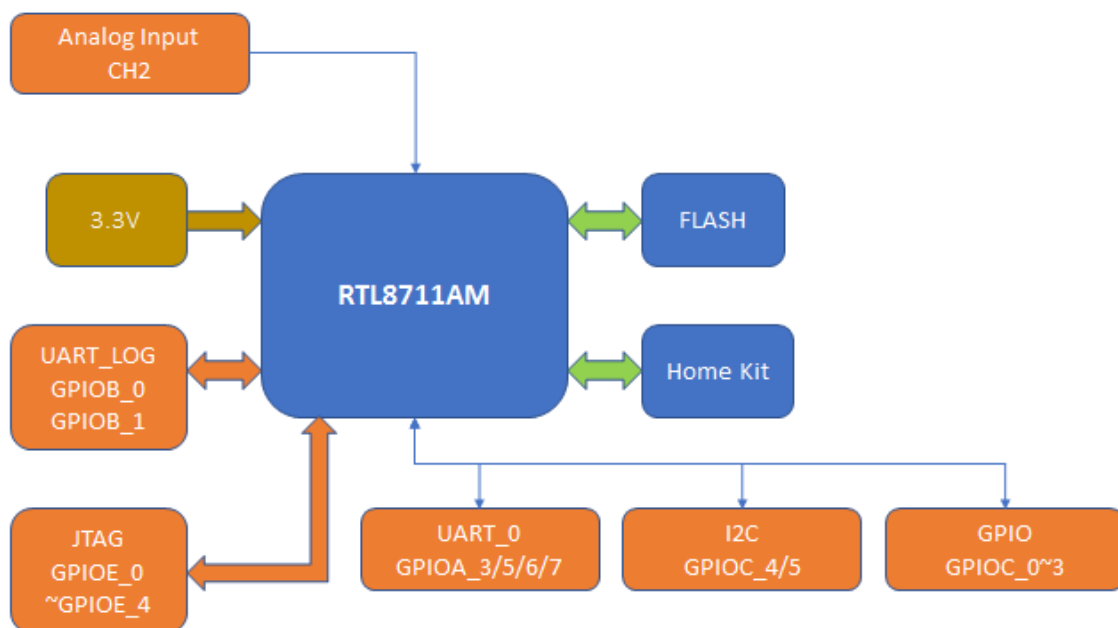
## I. Introduction

DK-9169 series is a compact, surface mount with low power 802.11n Wireless LAN(WLAN) module. It combines an ARM CM3 MCU, WLAN MAC, a 1T1R capable WLAN baseband, and RF function. It also provides a bunch of configurable GPIOs which are configured as digital peripherals for different applications and control usage. Since its small size, outstanding performance at low power consumption and low cost, the DK9169 series is leading the way for the new generation of Wi-Fi modules.

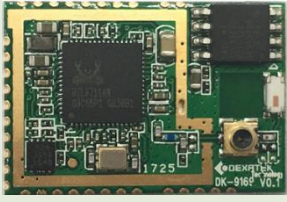

## II. Features

- ARM® Cortex™-M3 (up to 166MHz)
- IEEE 802.11b/g/n WLAN, CMOS MAC, PHY and RF
- IEEE 802.11n 2.4GHz OFDM, IEEE 802.11i WPA,WPA2
- 1T1R One Transmit and one Receive Path
- Memory capacity :
  - 1MB of ROM
  - 512Kb of SRAM
  - 2MB of SDRAM
  - Flash size: 4MB
- Peripheral interfaces: UART/I2C/I2S/SPI/GPIO

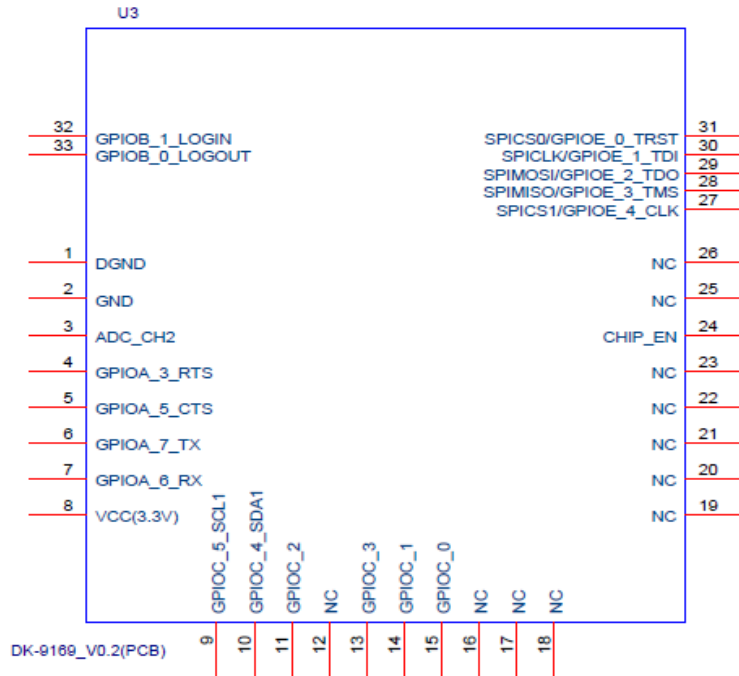
## III. Application Block Diagram



## IV. Specification

	DK-9169	DK-9169A
<b>Model</b>		
<b>Antenna</b>	Chip Antenna	Chip Antenna
<b>Main Chip</b>	RTL-8711AM	RTL-8711AM
<b>Application</b>	Home kit	Non-Home kit
<b>CP MFi / PA</b>	CP MFi	w/o CP MFi
<b>Wireless Standards</b>	802.11 b/g/n	
<b>Data Rates</b>	802.11n up to 150 Mbps, 802.11g up to 54Mbps	
<b>Frequency Range</b>	2.4GHz~2.5GHz (2400M~2483.5M)	
<b>Wireless Security</b>	WPA/WAP2	
<b>RF Output Power</b>	15±dBm@11b, 14±dBm@11g, 12±1dBm@11n	
<b>Receiver Sensitivity</b>	11Mbps-80dbm, 54Mbps-68dBm, 65Mbps-64dbm	
<b>SPI</b>	1	
<b>IC2</b>	3	
<b>GPIO</b>	10	
<b>Voltage:</b>	DV 3.3V	
<b>Dimension(L×W×H)</b>	17.4×13.7×1.9 mm	
<b>Certification</b>	RoHS / Declaration ID / BQB Test / FCC/ CE RF	
<b>Environment</b>	Operating Temperature: -25°C~75°C	
	Storage Temperature: -40°C~85°C	
	Operating Humidity: 10%~90% non-condensing	
	Storage Humidity: 5%~90% non-condensing	

## V. Module Pin Definition

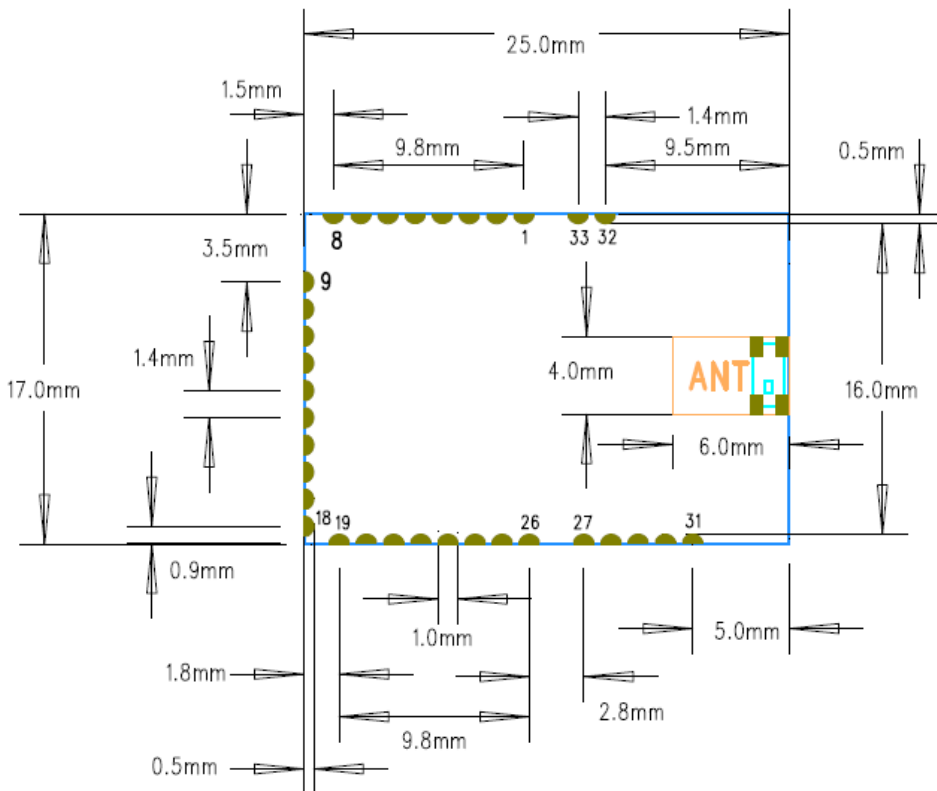


DK-9169 Module Pin Definition			
1	<u>GND</u>	18	NC
2	<u>GND</u>	19	NC
3	ADC_CH2	20	NC
4	GPIOA_3	21	NC
5	GPIOA_5	22	NC
6	GPIOA_7	23	NC
7	GPIOA_6	24	CHIP_EN
8	<u>VCC</u>	25	NC
9	GPIOC_5	26	NC
10	GPIOC_4	27	JTAG_CLK
11	GPIOC_2	28	JTAG_TMS
12	NC	29	JTAG_TDO
13	GPIOC_3	30	JTAG_TDI
14	GPIOC_1	31	JTAG_TRST
15	GPIOC_0	32	GPIOB_1_LOGIN
16	NC	33	GPIOB_0_LOGOUT
17	NC		

## VI. Mechanical Diagram

Product Dimension

PCB SIZE: (L) 25 x (W) 17 mm TOP View



Recommended Layout of solder Pad

TOP View

