DK9185 Series Wi-Fi 802.11a/b/g/n Module Specification

V1.0

Revision History

This table describes the changes to the Specification.

Version	Date	Description
1.0	2019-12-25	Official Release

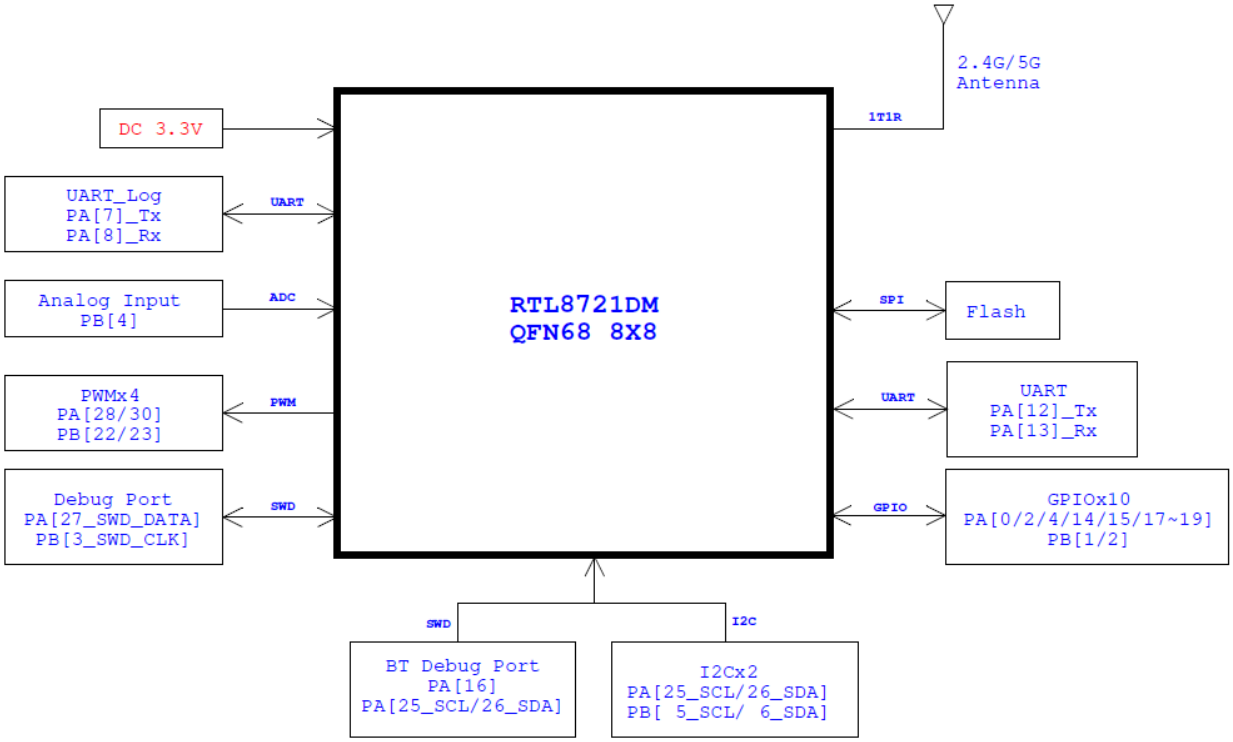
1. Introduction

DK-9185 series is a compact, surface mount with low power (2.4GHz/5GHz) 802.11a/b/g/n Wireless LAN(WLAN) module.
It combines a high-performance ARM v8m MCU, a low power v9 Cortex-M0 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 DK9185 is leading the way for the new generation of Wi-Fi modules.

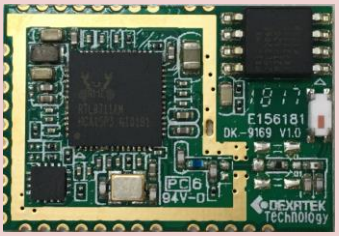
2. Features

- KM4:ARM latest v8M architecture with Cortex-M4F instruction compatible (up to 200MHz)
- KM0:ARM latest v8M architecture with Cortex-M0 instruction compatible (up to 20MHz)
- IEEE 802.11a/b/g/n 1x1, 2.4GHz & 5GHz
- 1T1R One Transmit and one Receive Path
- Peripheral interfaces: UART/I2C/I2S/SPI/GPIO

3. Application Block Diagram



4. Specification

Model	DK-9185
	
Antenna	Chip Antenna
Main Chip	RTL-8721DM
Wireless Standards	802.11 a/b/g/n 1x1, 2.4GHz & 5GHz
Data Rates	20MHz/40MHz up to MCS7
Wireless Security	WPA/WAP2
Receiver Sensitivity	11Mbps-80dbm,54Mbps-68dBm, 65Mbps-64dbm
Processor	KM4 : ARM Cortex-M4F KM0 : ARM Cortex-M0
SRAM	KM4 : 512KB KM0 : 64KB
Flash(MX25L3233FM2I-08G)	Size : 32Mb=4MB
PWM	4
ADC	1
UART	1
I2C	1
GPIO	8
Voltage:	DC 3.3V
Dimension(L×W×H)	17.4×13.7×1.9 mm
Environment	Operating Temperature: -20℃~75℃
	Storage Temperature: -40℃~85℃
	Operating Humidity: 10%~90% non-condensing
	Storage Humidity: 5%~90% non-condensing