

BC66 QuecOpen SDK

Release Notes

NB_IoT Module Series

Rev. BC66_QuecOpen_NB1_SDK_Release_Notes_V1.6

Date: 2020-08-31



1. Preamble

This document provides the Release Notes for BC66 QuecOpen SDK version **V1.6**. It describes major changes compared to BC66 QuecOpen SDK version **V1.5**. For a detailed listing of all changes, refer to the BC66 QuecOpen User Guide..

2. Matters Needing Attention

SN	Brief Description
[1]	In TCP/UDP scenarios where the link needs to be reopened frequently, it is recommended to set <local_port> to 0.

3. New Features

Item /Category	Brief description	Since
SOCKET	Optimized the behavior to obtain receiving format in TCP/UDP.	V1.2
RIL	Modified the buffer length of the RIL interface to 1400 bytes.	V1.2
OTHERS	Update Functional Documents and AT Documents.	V1.3
ADC	Unrestricted the time interval limitation of ADC sampling. The minimum time interval can be configured as 10ms.	V1.3
OTHERS	Modified the implementation of QI_OS_GetMessage for dedicated scenarios – ADC/Normal EINT/Normal TIMER. This function will not return after the callback is called. It will go to the message receive code again internally to fetch the next message.	V1.3
OTHERS	Updated the RTC and LWM2M example.	V1.3
GPIO	Added the GPIO pins (GPIO0, USB_MODE, GPIO6~GPIO8).	V1.4
TIMER	Added timer API for microsecond counting.	V1.4
TIMER	Added QI_Timer_Delete API to delete current timer ID.	V1.4
OTHERS	Added QI_Delay_us API to microsecond delay.	V1.4
UART	Added QI_UART_GetOption API to query UART parameters.	V1.4
OTHERS	Added QI_OS_GetCurrentTaskLeftStackSize API for querying remaining stack size for dedicated task.	V1.4

ADC	Added QI_ADC_Read API to single read ADC values.	V1.4
OTHERS	Added QI_OS_GetTaskTickCount and QI_OS_GetTaskTickCountFromISR API to count of ticks.	V1.4
SYSTEM	Updated the return value of event and mutex interfaces.	V1.4
GPIO	Enable GPIO1/GPIO2/GPIO3/GPIO5 support EINT function.	V1.5
ADC	Enable GPIO7 and GPIO8 to support ADC function.	V1.5
SYSTEM	Added the interfaces of Flash that support the specified address to write and read.	V1.5
SYSTEM	Added QI_GetWakeUpReason API to get the reason of the module wakeup from deepsleep.	V1.5
SYSTEM	Added QI_PowerDown API to power down the module.	V1.5
SYSTEM	Added QI_GetPowerVol API to obtain the module power supply voltage.	V1.5
SYSTEM	Added the example_psm_eint.c to demonstrate the use of PSM_EINT interrupt.	V1.5
SYSTEM	Added QI_DeepSleep_Register API to indicate the module enter deepsleep.	V1.5
RIL	Added the RIL interfaces of the AT command that related to the SIM card: AT+CPIN、AT+CIMI、AT+QCCID	V1.5
RIL	Added the ril interfaces of some common AT commands: AT+CGMR, AT+CFUN, AT+CPSMS, AT+CSQ、AT+CSCON、AT+QENG、AT+QNBIOTRAI.	V1.5
SOCKET	Added the API interfaces of socket and examples of TCP/UDP function.	V1.5
OTHERS	Added standard library interface: QI_vsprintf and QI_vsnprintf.	V1.5
OTHERS	Added freertos system APIs.	V1.5
OTHERS	Added the structure ST_AppVerCfg for APP version number.	V1.5
TIME	Added QI_GetRealLocalTime API to obtain the RTC time.	V1.6
SYSTEM	Added boot reasons of QI_GetPowerOnReason.	V1.6
SYSTEM	Added forced power down and reset function of QI_PowerDown.	V1.6
SSL	Added the SSL RIL APIs and example.	V1.6
MQTTS	Added the MQTTS RIL APIs and example.	V1.6
LwM2M	Added an URC API to handle +QLWNOTIFY URC.	V1.6
OTHERS	Add querying the IP address action in the protocol examples.	V1.6

4. Improved Features

Item/Category	Brief description	Since
RIL	Fixed the bug that change the RIL interface of network protocol to solve the problem of memory leakage.	V1.2
SOCKET	Fixed the bug that json data cannot be processed in TCP/UDP	V1.2
OTHERS	Fixed the bug that the module will crash when frequent using AT+Qrst=1.	V1.2
RIL	Fixed the bug that -4(RIL_AT_INVALID_PARAM) is returned when calling QI_RIL_SendATCmd() to send non AT commands.	V1.2
GPIO	Fixed the bug that some GPIOs will hop during power on phase.	V1.3
UART	Fixed the bug that UART will be stuck when receive 1400 more bytes in one time.	V1.4
TIME	Fixed the bug that the time reading result is wrong when set a time-zone not equal to 32 using QI_SetLocalTime API.	V1.4
SOCKET	Updated the RIL interfaces and example of TCP/UDP.	V1.5
MQTT	Updated the RIL interfaces and example of MQTT.	V1.5
RIL	Fixed the bug that the module stuck when using AT command of "AT+CGATT=1".	V1.5
ADC	Fixed the bug that ADC sampling is not accurate.	V1.5
TIMER	Optimized timer interfaces QI_Timer_Start 、 QI_Timer_Stop 、 QI_Timer_Delete which can be called in different tasks.	V1.5
DOC	Updated the related documents.	V1.6
TOOL	Updated the download tool to QFlash V4.18.	V1.6

5. Known Issues

Item/Category	Brief Description
NTP	AT+QNTTP does not support use the IPV6 NTP server to synchronize time currently.

6. Functions

Basic API

UART	GPIO	EINT	PWM	ADC	IIC	SPI	SYSTEM	TIME
Y	Y	Y	Y	Y	Y	Y	Y	Y
TIMER	RTC	POWER	MEMORY	TRACE	STDLIB			
Y	Y	Y	Y	Y	Y			

RIL API

AT	Secure Data	SOCKET	DFOTA	MQTT	LwM2M
Y	Y	Y	Y	Y	Y

NOTES

1. Y means the SDK supports this function.
2. N means the SDK does not support this function.