

RN4678/RN4678APL Firmware 1.13.5 Release Notes

8/29/2018

1 Overview

Version 1.13.5 is a minor firmware release for RN4678-V/RM and RN4678APL-V/RM Bluetooth dual mode modules. This release notes provides a list of new features and resolves issues.

2 New Features

- Added 'SVL,<text>' command to change the MFi accessory serial number. 'GVL' command will get the MFi accessory serial number. (RN4678APL only)
- Dormant mode enables deep sleep with lowest power in RN4678. '0,0' command can be issued to enter dormant mode. The WAKEUP pin can be pulled logic low to wake up the module from dormant mode.
- The SW_BTN pin function can be enabled/disabled using bit 3 in 'SQ,<hex16>'command. Setting the bit ('SQ,0008') will enable SW_BTN pin function and clearing the bit will disable the SW_BTN function.
- UART baud rate of 1Mbps can be enabled by setting the baud rate using 'SU,<hex8>' value of 0x11. 'SU,11' sets UART baud rate to 1Mbps.
- The command 'SF,2' will restore to settings to factory defaults similar to the operation performed by 'SF,1' and in addition will restore the MFi accessory parameters to default values. (RN4678APL only)
- The command 'SO,,' will suppress all status strings including the following status messages:
 - "Rebooting" message after issuing 'R,1' command or reboot after disconnect feature 'SQ,0080'
 - "Trying" message after issuing 'C[,[<0,1>,]<address>]' command
- The support for iAP2 app launch and app launch method is enabled in 'SQ,<hex16>' command. The following bit map description for 'SQ,<hex16>' can be used to access app launch features. (RN4678APL only)

SQ, <hex16> Bit Map</hex16>	Description
	(Refer command user's guide for other options.)
0x0040	If set, the iAP2 app launch will be disabled.
0x0020	If set, iAP1 will be enabled. iAP1 is disabled by default.
0x0010	If set, the iAP2 app launch method will be set to launch without user alert.

 Added set/get commands for power-on('STO,<hex8: 0x00-0xFF>') and disconnect('STD,<hex8: 0x00-0xFF>') standby mode time interval. The factory defaults will set to never enter power-on and disconnect standby mode.

3 Resolved Issues

- Fixed issue with 'GK' command where the ACP fail status (0,4,0) was not shown on power on. (RN4678APL only)
- Fixed issue where the module would factory reset when continuous entry of invalid PIN code more than 70 times during successive pairing sessions.
- Updated connection status pin P1 5 to indicate the connected status immediately after establishing BT connection. With the previous version of the firmware, status pin will be pulled low only after the data session is open using an app after getting connected successfully and pulled high when disconnected. With the fix, connection status pin will be pulled low right after the module is connected successfully and will be pulled high when disconnected. On powered-on and not connected, the status pin will be pulled high.
- For BLE connections with bonding, an existing entry of a paired and bonded device in the Paired Device List ('Y' command) will be replaced with new bonding information if the device chooses to unpair and pair and bond again. Behavior for this BLE connection operation in previous firmware versions will create a new duplicate pair and bond entry which is expected to be managed by the user using 'U,<Z,1-8>' command. The Classic SPP connections is not affected by this issue.
- The current guiet mode 'Q,?' command has been updated to reflect the correct quiet mode state of '0' i.e., discoverable and able to connect for both Classic and BLE modes, after power cycle or reboot or disconnect events.

4 Known Issues

None

5 Ordering Information

Below are the part numbers to order RN4678 and RN4678APL modules with 1.13.5 firmware. The 1.13.5 firmware image is also available on the www.microchip.com product pages for the RN4678.

Part numbers:

• RN4678: RN4678-V/RM113 RN4678APL-V/RM113 • RN4678APL:

6 Firmware Update Instructions for RN4678 PICtail

The instructions and tools used to update firmware on evaluation board such as the RN4678 PICtail are provided in Appendix A in the user guide for the board. The link to the user guide:

RN4678 PICtail/PICtail Plus Daughter Board User's Guide