



IS1678SM/BM78SPP Firmware 1.35

Release Notes

1 Overview

Firmware version 1.35 is a maintenance release for IS1678SM, and BM78SPPx5MC2, Microchip's Bluetooth 4.2 dual mode SoC and module

1.1 Resolved Issues

- **Dropped BLE Connection while updating Connection Parameters**
While connected to some Android devices, the BLE connection is dropped during connection parameters update request procedure due to response timeout. The time interval has been increased to allow connection parameters to be updated.
- **Dynamic Name Update in Manual Pattern**
The dynamic update of BLE device name advertisement data type in advertisement data using Manual Pattern command would not succeed after the command was issued. This issue is fixed.
- **GATT Service Discovery Failed with Encrypted BLE Link**
Remote device would be unable to discover the complete GATT server service table with encrypted BLE connection enabled. This issue is resolved.
- **Connectivity Issue With iOS device**
Deleting a paired IS1678SM/BM78 from an iOS device would prevent it from establishing SPP data connection on subsequent Bluetooth re-pair and connect attempt. This issue is fixed.
- **BLE Advertising Issue in Standby mode**
BLE advertisements might stop suddenly during Standby mode. This issue is fixed.
- **SW and HW version format for legacy iOS protocol**
Incorrect SW and HW version format for when using legacy protocol on iOS devices. This has been fixed.

1.2 New Features

- Added credit based flow control to Transparent UART service.
- New UITool parameter for BLE device address and name.
- New UITool parameter to disable app launch feature for iOS devices.
- New UITool parameter to disable legacy protocol support for iOS devices.
- Extended maximum sizes of parameters for iOS devices.
 - Accessory name and serial number extended to max of 32 bytes
 - Accessory model number extended to max of 32 bytes
 - Accessory manufacturer name extended to max of 128 bytes
 - Accessory FW version value extended to max of 16 bytes

1.3 PC Tools

IS1678SM/BM78SPP firmware 1.35 is used with the following PC tools included in the firmware package, or downloaded from www.microchip.com/BM78:

- | | |
|---|--|
| • IS1678SM_UI_Tool v100.122 | Configuration Editor for IS1878/BM78 |
| • IS1678 Manual Pattern Test Tool v0.39 | Utility to test Manual Pattern Commands |
| • IS1678_Auto_Pattern_Test_Tool v026 | Utility to test Auto Pattern Mode Commands |

- isbtflash_21_Adv 3.0.0.21
- EEPROM_TOOL

Flash Update Tool to for Firmware Update
Configuration loader for UITool editor

1.4 Ordering Information

To order BM78 modules with firmware 1.35, use the following part numbers:

- BM78SPPS5MC2-0004AA Shielded Module, on board chip antenna
- BM78SPP05MC2-0004AA Un-shielded Module, external antenna, compact size

1.5 Firmware Update

BM78 modules and EVB, such as PICTails, can be updated to firmware 1.35 using the PC Utilities mentioned previously. The utilities are provided in the firmware package that can be downloaded from the www.microchip.com/BM78. To perform a firmware update follow the instructions provided in the firmware release.