



# **CS108 Firmware and Demo App Software Release Notes**

**2021 September 17**

## **Firmware Release Notes:**

- 1. Silicon Lab IC Firmware**
- 2. Bluetooth IC Firmware**
- 3. Atmel IC Firmware (RFID Firmware)**

**Demo App Software Github Site Links (Release Notes  
and Source Codes for Download)**

# Contents

Contents ..... 2

Silicon Lab IC Firmware ..... 3

Bluetooth IC Firmware: ..... 4

Atmel IC Firmware (RFID Firmware)..... 5

Github Sites for Demo Apps ..... 7

# Silicon Lab IC Firmware

SiliconLab Image App Release Notes		
Release version	Changes	Date
1.0.16	<ul style="list-style-type: none"> <li>• Add auto report of trigger state command.</li> </ul>	2021-08-11
1.0.15	<ul style="list-style-type: none"> <li>• For main board version 2.7 or after</li> <li>• Cancel battery fault detection</li> </ul>	2020-05-29
1.0.14	<ul style="list-style-type: none"> <li>• For main board version 2.7 or after</li> <li>• Add I2C command for STUSB.</li> <li>• Add offset to battery voltage value.</li> </ul>	2020-04-09
1.0.13	<ul style="list-style-type: none"> <li>• Remove interrupt save/restore in USB send packet</li> </ul>	2019-08-30
1.0.12	<ul style="list-style-type: none"> <li>• Fix a possible memory overflow</li> </ul>	2019-08-26
1.0.11	<ul style="list-style-type: none"> <li>• Add Siliconlab force reset command</li> </ul>	2019-08-22
1.0.10	<ul style="list-style-type: none"> <li>• Improve USB disconnection detection</li> </ul>	2019-08-16
1.0.9	<ul style="list-style-type: none"> <li>• Fix USB hang during barcode scanning</li> </ul>	2017-11-21
1.0.8	<ul style="list-style-type: none"> <li>• Add sequence number for RFID packet</li> </ul>	2017-11-20
1.0.7	<ul style="list-style-type: none"> <li>• Add system reset if USB is disconnected</li> </ul>	2017-08-28
1.0.6	<ul style="list-style-type: none"> <li>• Add trigger button to turn on BT</li> <li>• Add P3.0 VBUS control</li> </ul>	2017-08-18
1.0.5	<ul style="list-style-type: none"> <li>• Fix CRC error of long packet</li> </ul>	2017-06-28
1.0.4	<ul style="list-style-type: none"> <li>• Add EEPROM read/write serial no., model and keys</li> </ul>	2017-05-19
1.0.3	<ul style="list-style-type: none"> <li>• Fix trigger button current leakage</li> </ul>	2017-05-17
1.0.2	<ul style="list-style-type: none"> <li>• Add auto battery reporting function</li> </ul>	2017-04-26
1.0.1	<ul style="list-style-type: none"> <li>• Power off RFID when BT disconnected</li> </ul>	2017-03-17
1.0.0	<ul style="list-style-type: none"> <li>• Initial version</li> </ul>	2017-03-06

SiliconLab Bootloader Release Notes		
Release version	Changes	Date
0.0.0	<ul style="list-style-type: none"> <li>• Initial version</li> </ul>	2017-03-06

# Bluetooth IC Firmware:

BT CC2541 Bluetooth IC Image App Release Notes		
Release version	Changes	Date
1.0.17	<ul style="list-style-type: none"><li>Fix incomplete packet sending in some rare cases.</li></ul>	2021-08-24
1.0.16	<ul style="list-style-type: none"><li>Add hopping test API.</li></ul>	2020-10-22
1.0.15	<ul style="list-style-type: none"><li>Update to BLE library version 1.5.0 with Bluetooth 5.0 protocol but only LE 1M PHY</li></ul>	2019-09-20
1.0.14	<ul style="list-style-type: none"><li>Fix barcode trigger mode</li></ul>	2018-08-24
1.0.13	<ul style="list-style-type: none"><li>Fix barcode vibration mode</li></ul>	2018-08-17
1.0.12	<ul style="list-style-type: none"><li>Modify vibrator tag inventory mode</li><li>Add trigger release mode</li></ul>	2018-08-16
1.0.11	<ul style="list-style-type: none"><li>Modify vibrator on command</li></ul>	2018-05-28
1.0.10	<ul style="list-style-type: none"><li>Enable overlapped processing</li></ul>	2018-04-23
1.0.9	<ul style="list-style-type: none"><li>Change connection interval 15-15</li></ul>	2018-04-19
1.0.8	<ul style="list-style-type: none"><li>Change connection interval 15-30</li></ul>	2018-04-18
1.0.7	<ul style="list-style-type: none"><li>Fix BT packet length bug</li></ul>	2018-04-17
1.0.6	<ul style="list-style-type: none"><li>Add BT disconnection command</li></ul>	2018-04-10
1.0.5	<ul style="list-style-type: none"><li>Add vibrator on/off commands</li><li>Add second send of trigger released packet.</li></ul>	2018-04-06
1.0.4	<ul style="list-style-type: none"><li>Change BT discoverable power on default to on</li></ul>	2017-11-09
1.0.3	<ul style="list-style-type: none"><li>Add trigger button to turn on BT</li></ul>	2017-08-11
1.0.2	<ul style="list-style-type: none"><li>Add raw barcode command support</li></ul>	2017-04-25
1.0.1	<ul style="list-style-type: none"><li>Power off RFID when BT disconnected</li></ul>	2017-03-17
1.0.0	<ul style="list-style-type: none"><li>Initial version</li></ul>	2017-03-06

BT CC2541 Bootloader Release Notes		
Release version	Changes	Date
0.0.0	<ul style="list-style-type: none"><li>Initial version</li></ul>	2017-03-06

# Atmel IC Firmware (RFID Firmware)

RFID Application: R2000 MAC Firmware on Atmel IC Release Notes		
Release version	Changes	Date
2.6.42	<ul style="list-style-type: none"> <li>Add EM4325 <b>GetSensorData</b> command.</li> </ul>	2021-09-09
2.6.41	<ul style="list-style-type: none"> <li>Add FM13DT160 tag IC commands</li> </ul>	2020-11-30
2.6.38	<ul style="list-style-type: none"> <li>Fix channel 4 power for -8 country</li> </ul>	2020-09-18
2.6.37	<ul style="list-style-type: none"> <li>Fix test antenna index</li> </ul>	2020-08-03
2.6.36	<ul style="list-style-type: none"> <li>Add TXON = 0 for continuous TX</li> </ul>	2020-07-30
2.6.35	<ul style="list-style-type: none"> <li>Fix target power upper limit setting</li> </ul>	2020-07-07
2.6.34	<ul style="list-style-type: none"> <li>Fix USB hang</li> </ul>	2020-01-13
2.6.33	<ul style="list-style-type: none"> <li>Fix GET_SERIAL command no response</li> </ul>	2020-01-10
2.6.32	<ul style="list-style-type: none"> <li>Add special power limit for -8 reader</li> </ul>	2019-12-19
2.6.31	<ul style="list-style-type: none"> <li>Add special checking for Brand ID support</li> </ul>	2019-12-04
2.6.30	<ul style="list-style-type: none"> <li>Add Ucode8 Brand ID support</li> </ul>	2019-12-02
2.6.29	<ul style="list-style-type: none"> <li>Add TAM2 ProtMode 2 or 3 support</li> </ul>	2019-09-30
2.6.28	<ul style="list-style-type: none"> <li>Add CS203I support</li> </ul>	2019-09-05
2.6.27	<ul style="list-style-type: none"> <li>Add port index in compact mode packet</li> </ul>	2019-09-04
2.6.26	<ul style="list-style-type: none"> <li>Add CS206 &amp; CS468J support</li> </ul>	2019-08-14
2.6.25	<ul style="list-style-type: none"> <li>Add 0x336 mac error report in inventory_cycle_begin packet.</li> <li>Add CW hold time delay in TAGMSK_DESC_CFG register</li> </ul>	2019-07-02
2.6.24	<ul style="list-style-type: none"> <li>Add 0.5ms delay for RFMicro model 402h read RSSI command</li> </ul>	
2.6.23	<ul style="list-style-type: none"> <li>Return all EPCs for multi-bank inventory</li> </ul>	2019-04-02
2.6.22	<ul style="list-style-type: none"> <li>Add 0.5ms delay for RFMicro model 403h read RSSI command</li> </ul>	2019-03-06
2.6.21	<ul style="list-style-type: none"> <li>Add handling of RF Micron Temperature Tag</li> </ul>	2019-02-20
2.6.20	<ul style="list-style-type: none"> <li>Cancel power up packet for CS108</li> </ul>	2018-09-20
2.6.18	<ul style="list-style-type: none"> <li>Change default maximum allowed target power to 330</li> </ul>	2018-08-27
2.6.17	<ul style="list-style-type: none"> <li>Fix custom maximum allowed target power</li> </ul>	2018-08-23
2.6.16	<ul style="list-style-type: none"> <li>Change register 0x0900 default value to 0x0000</li> </ul>	2018-07-23

2.6.15	<ul style="list-style-type: none"> <li>• Add power up packet type 0xF000 for CS108</li> </ul>	2018-07-09
2.6.14	<ul style="list-style-type: none"> <li>• Fix read/write problem</li> </ul>	2018-04-30
2.6.13	<ul style="list-style-type: none"> <li>• Fix multi-bank inventory problem when tag delay &gt; 0</li> </ul>	2018-04-27
2.6.12	<ul style="list-style-type: none"> <li>• Fix tag delay problem</li> </ul>	2018-04-18
2.6.11	<ul style="list-style-type: none"> <li>• Add inventory cycle delay setting</li> </ul>	2018-04-16
2.6.10	<ul style="list-style-type: none"> <li>• Fix compact mode inventory bug</li> </ul>	2018-04-12
2.6.09	<ul style="list-style-type: none"> <li>• Clear tag buffer when compact mode inventory is aborted</li> </ul>	2017-12-08
2.6.08	<ul style="list-style-type: none"> <li>• Add compact mode inventory response packet</li> </ul>	2017-11-15
2.6.07	<ul style="list-style-type: none"> <li>• Support up to 31 retries for tag access operation</li> </ul>	2017-08-21
2.6.06	<ul style="list-style-type: none"> <li>• Reduce EAS alarm rate</li> <li>• Change inventory default continuous mode</li> </ul>	2017-06-28
2.6.05	<ul style="list-style-type: none"> <li>• Add reduce tag rate parameter</li> <li>• Add Authenticate, ReadBuffer, Untraceable commands</li> </ul>	2017-02-16
2.6.04	<ul style="list-style-type: none"> <li>• Fix profile initial bug</li> </ul>	2017-01-17
2.6.03	<ul style="list-style-type: none"> <li>• Add SJC test code</li> </ul>	2017-01-06
2.6.02	<ul style="list-style-type: none"> <li>• Change external PA control pin to PA31</li> </ul>	2016-11-09
2.6.01	<ul style="list-style-type: none"> <li>• Fix profile bug</li> </ul>	2016-11-02
2.6.00	<ul style="list-style-type: none"> <li>• Initial version</li> </ul>	2016-11-02

<b>RFID Bootloader: R1000 Bootloader Release Notes</b>		
Release version	Changes	Date
1.1.00	<ul style="list-style-type: none"> <li>• Initial version</li> </ul>	2016-11-02

# Github Sites for Demo Apps

Please go to the following respective Github sites for demo app release notes and their corresponding source codes download:

**1) Objective C Demo App Github Site:**

<https://github.com/csIrfid/CS108-iOS-ObjC-App/releases>

**2) Swift Demo App Github Site:**

<https://github.com/csIrfid/CS108-iOS-Swift-App/releases>

**3) C# Demo App Github Site:**

<https://github.com/csIrfid/CS108-Mobile-CSharp-DotNetStd-App/releases>

**4) Android Java Demo App Github Site:**

<https://github.com/csIrfid/CS108-Android-Java-App/releases>