RFD40/RFD90 Software Release Notes (SAAFKS00-008-R00)

Release Notes for RFD40/RFD90 SAAFKS00-008-R00   Released   2-Dec-2024

Contents

Introduction

This release notes is for the RFD40 and RFD90 firmware release SAAFKS00-008-R00, this firmware supports all RFD40 and RFD90 models.

Software Deliverables

SAAFKS00-008-R00 contains the following firmware components:

IMAGE TYPE	VERSION	FILE NAME
Bootloader	BAAFKS00-002-R00	BAAFKS00-002-R00E0.DAT
ProductCode Firmware	PAAFKS00-008-R00	PAAFKS00-008-R00E0.DAT
RFID module Firmware	2.0.45	nge-bf525-dev-rev2.0.45.hex
Scanner firmware	PAAEOC20-003-R01	PAAEOC20-003-R01D0.DAT

SAAFKS00-008-R00 major changes since SAAFKS00-007-R00

- IOT Connector Support for multiple wifi profiles & delete wifi profile.
- Support to configure wifi profile as preferred one.

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- Support for adding generic end point type "MDM".
- IOT Connector API version number change to V1.2 in connect/disconnect and LWT message.
- Offline configuration support for WiFi, Endpoint and IOT Connector configurations.
- Ability to send notifications when IOT Connector end point is connected or disconnected.
- Ability to configure wifi channel to use 2.4 or 5 G channels.

Issue Fixes

- SPR-54797 – USB getting disconnected from Windows when trying to perform inventory on RFD90.

Additional Notes

- Updating the RFD40/RFD90 reader firmware over USB can take about 5-9 minutes to complete depending on current firmware version on the reader. When updating the RFD40/RFD90 reader using Bluetooth it takes longer and can take about 10-22 minutes to complete depending on current firmware version on the reader. Please wait for the above time to update the reader and connect back once the reader restarts after firmware update.
- SOTI Connect Users: Device management using SOTI Connect for RFD40 and RFD90 RFID Readers upgraded to this firmware requires SOTI Connect v2025.0 or later. Please always check compatibility with SOTI Connect before upgrading RFD40 and RFD90 firmware.
- Changing the regulatory on the RFD40/90 results in reinitialization of Wifi/BT module which will result in disconnect of connected Bluetooth device. Bluetooth reconnection is needed to continue operation using Bluetooth with RFD40/90 after the regulatory is set.
- Configuring certificates on RFD40/90 using IOS or Android SDK or app is supported only with RFD40/90 firmware version SAAFKS00-008-** or above.
- RFD40/90 supports a maximum of two end point configuration (upto 1200 bytes in size) and two wifi configurations (max 1022 bytes) using 123RFID Offline configuration.
- RFD40/90 supports a maximum of 4 different certificates to be installed currently.
- To use RFD40/RFD90, Zebra CDC driver should not be installed on Windows 10 PC.
- iPhone eConnex HID mode is not supported.
- SOTI Connect is not yet supported with RFD40 standard device over communication cradle (Ethernet).
- It is necessary to reboot the reader for wifi and end point configuration to take effect.
- IoT Endpoint name length is limited to 15 characters, URL is limited to 511 characters

Known Issues

- "WPA3_Enterprise_CCMP_256" & "WPA3_Enterprise_GCMP_128" are not supported even though this is listed in 123RFID Desktop.
- Sometimes when used with WPA 3 Enterprise device does not get IP address for long time.
- In some scenarios specific SSID of interest may not be listed after a scan. Retry the scan will help. The SSID can also be manually added in 123RFID Desktop.
- Rarely after usage with wireless device does not get detected over USB. Reboot will allow the same to be detected over USB.

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SAAFKS00-007-R00 major changes since SAAFKS00-006-R01

Feature Additions and Enhancements

- Support for Wifi on the device (RFD40 Premium / Premium, RFD90) to be used for device management and monitoring. The following wireless protocols are supported.
    - WPA / WPA2 / WPA3 Personal.
    - WPA / WPA2 Enterprise.
    - WPA3 Enterprise with support for GCMP 256 (SHA256 and Suite B 192).
- Support for SOTI Connect to configure, manage and monitor RFD40 and RFD90 RFID Readers.
- Optimization in write operation and improved RFID Tag write performance for all memory banks.
- Supports HEX to ASCII conversion of RFID tag data in HID mode.
- Supports custom model RFD4031-G00B702-US.

Issue Fixes

- Fix for the issue - RFID error when reading memory banks of tags with EPC more than 256 bits using access criteria.
- Fixed issue of intermittent firmware Update failure over Ethernet cradle.

SAAFKS00-006-R01 major changes since SAAFKS00-005-R00

- Supports Datawedge application.
- Supports Bluetooth Scan to Connect from the second device without disconnecting from the first device.
- Adds support for Falkland Islands, French Guiana, Guernsey, Jersey, Namibia, and Bhutan regions.
- Adds support for up to 32 RFID prefilters.
- Adds support of eConnex low power mode.
- Other bug fixes to improve system stability.

SAAFKS00-005-R00 major changes since SAAFKS00-004-R04

- Supports 2D parameter barcodes generated with 123RFID Desktop.
- Supports Uganda region.
- Changed SKU for Guam, US Virgin Islands, Puerto Rico regions.
- Fixed issue of some country HID keyboard types.
- Fixed issue of iOS virtual keyboard not working with certain trigger configurations.
- Fixed known issues listed in SAAFKS00-004-R04 release notes.
- Other bug fixes to improve system stability.

SAAFKS00-004-R04 major changes since SAAFKS00-003-R03

- Supports HID mode prefix and suffix basic data formatting rules.

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- Supports scanner batch mode with SSI command to get batched data.
- Supports eConnex scanner batch mode.
- Supports factory default reset with upper trigger without application.
- Supports eConnex connection with 3rd party Android phones.
- Supports charging mobile terminals over eConnex interface.
- Supports UK 900MHZ region in World SKU.
- Supports reader friendly name.
- Supports more battery statistics data.
- Supports RFID same tag timeout setting for HID mode.
- Supports iOS soft keypad ejection in HID mode.
- Fixed issues of trigger keymapping, batch mode and HID mode.

SAAFKS00-003-R03 major changes since SAAFKS00-002-R03

- Supports new trigger keymapping design to customize trigger usage.
- Supports firmware update and reader configuration with multi-slot communication cradle.
- Supports discovery service with multi-slot communication cradle.
- Supports customized Bluetooth discoverable timeout.
- Fixed issue of factory default reset does not work after loading offline configuration file.
- Fixed issue of standard model reader not going to low power mode.
- Fixed scanner offline configuration file update.
- Updated RFD90 medium range antenna power level.
- Updated India SKU frequency band.
- Removed the uncertified Japan region from Japan SKU

SAAFKS00-002-R03 major changes since SAAFKS00-001-R05

- Supports all RFD90 models.
- Supports all RFD40 Bluetooth models.
- Supports Windows, Android and iOS Bluetooth host.
- Supports all RFD40 scanner models.
- Supports encrypted RFID and scanner module firmware update.
- Supports USB and Bluetooth HID mode.
- Supports Bluetooth and USB RFID batch mode.
- Supports Bluetooth scanner batch mode.
- Fixed intermittent reader reboot issue when testing access operation with certain tags.
- Fixed long term RFID inventory fastest read profile stop reading issue.
- Improved iOS Bluetooth barcode test stability.

SAAFKS00-001-R05 major changes since SAAFKS00-001-R03

- Implemented RFID Regulatory Errata List on RFD40.
- Fix radio error F8 248 with NGE 2.0.40 firmware.