1.0 Authorization

Engineering	Engineering Manager	Manufacturing Manager	Quality Manager

2.0 Procedure Revision History

Revision	Date	Detail of Change	Changed by
AA	Sept 16 2014	Initial Release	Isaac Kuruvilla

FCC ID : 2AC9T-DORIN16MB

This device complies with Part 15 of the FCC Rules -exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

This product contains a radio transmitter with 802.11b/g/n technology which has been tested and found to be compliant with the applicable regulations governing a radio transmitter in the 2.400 GHz to 2.4835 GHz frequency range.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-- Consult the dealer or an experienced radio/TV technician for help.

The Dorin ASYDORINWLAN RF Module complies with Part 15 of the FCC rules and regulations. Compliance with the labeling requirements, FCC notices and antenna usage guidelines is required.

To fulfill FCC Certification, We must comply with the following regulations:

1.The system integrator must ensure that the text on the external label provided with this device is placed on the outside of the final product

2.Dorin ASYDORINWLAN RF Module may only be used with antennas that have been tested and approved for use with this module [refer to the antenna specification].

Modifications not expressly approved by BSM Wireless could void the user's authority to operate the equipment.

IMPORTANT: We must test final product to comply with unintentional radiators (FCC section 15.107 & 15.109) before declaring compliance of their final product to Part 15 of the FCC Rules.

IMPORTANT: The RF Module has been certified for remote and base radio application only.

RF Exposure

WARNING: To satisfy FCC RF exposure requirements for mobile transmitting devices, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation. to ensure compliance, operations at closer than this distance are not recommended. the antenna used for this transmitter must not be co -located in conjunction with any other antenna or transmitter.

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3.0 PURPOSE

3.1 This document provides specific instructions on the assembly for the SFM7000.

4.0 SCOPE

4.1 Shall cover the Dorin module assembly on to the SFM7000 board. FCC ID **2AC9T-DORIN16MB**

5.0 RECORDS

5.1 Addition(s) to this work instruction must be approved by authorization in section one.

6.0 ASSOCIATED DOCUMENTS

6.1 N/A at this time.

7.0 DEFINITIONS

7.1 N/A: Not Applicable.

7.2 TBD: To Be Determined.

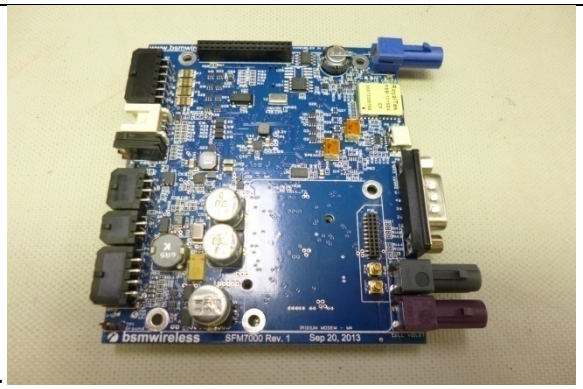
8.0 RESPONSIBILITY

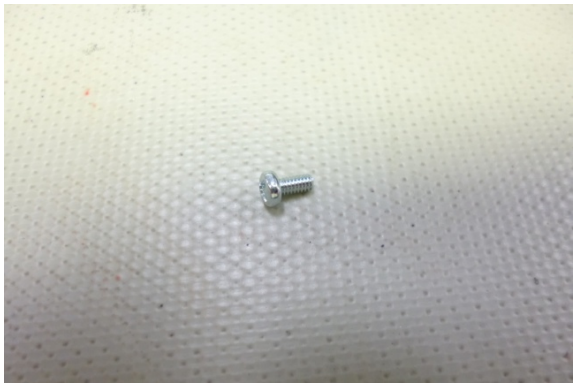
Name	Responsibilities
Management	Shall ensure operator(s) read and understand procedure(s) and to ensure operator(s) are following set procedure(s).
Supervisor	Ensure work instructions are followed
Process Engineering	Shall maintain set procedure(s). Any change(s) to set procedures shall be communicated to appropriate team member(s) by process engineering
Operator	Shall adhere to this procedure(s)
Maintenance	Shall understand set procedure(s)

9.0 SAFETY REQUIREMENTS

9.1 Only trained personnel to perform this operation.

10.0 INSTRUCTIONS

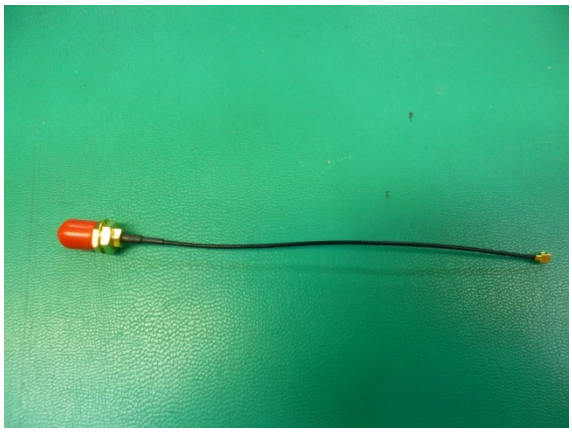
No.	Trailer Detector Board
A	Pick the following parts for assembly: 1. PCBA SFM7000 (qty 1pc) 2. PCIe Wifi PCBA Dorin Module ASYDORINWLAN (qty 1pc) 3. Sliver screws (qty 2 pcs) 4. Smaller sliver screws (qty 2pcs) 5. Battery (qty 1pc) 6. UFL Cable (qty 1pc) 7. Antenna Cable (qty 1pc) 8. Washer (1pc) 9. Black screws (qty 8pcs) 10. Aluminum Chassis (qty 1pc) 11. Front cover plate (qty 1pc) 12. Back cover plate (qty 1pc) 13. Wifi Antenna (1pc)
	1.  2.

3. 

4.

5.

6.

7. 

8.

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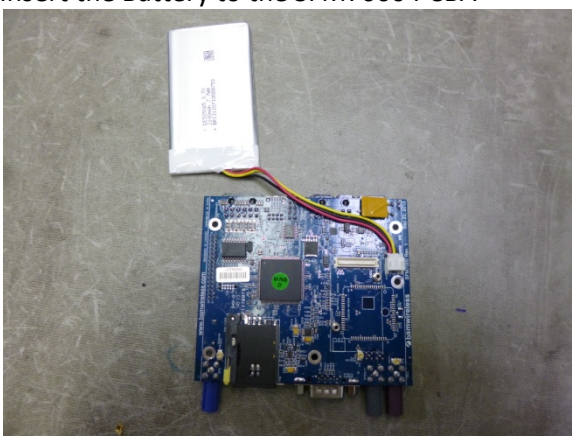
12.

13.

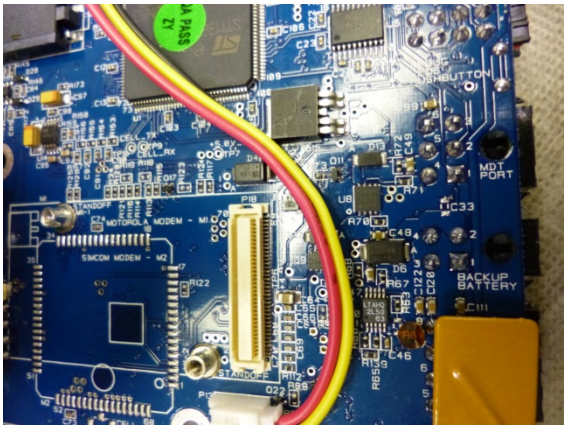
14.

B Assembly parts from process step A as shown in picture below.

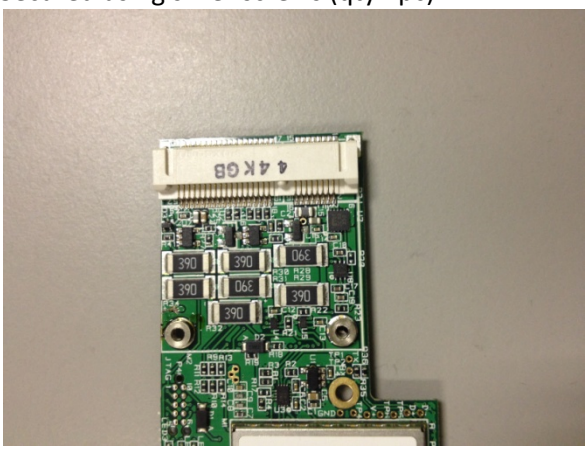
Insert the Battery to the SFM7000 PCBA



Route the battery cables (follow pic below)

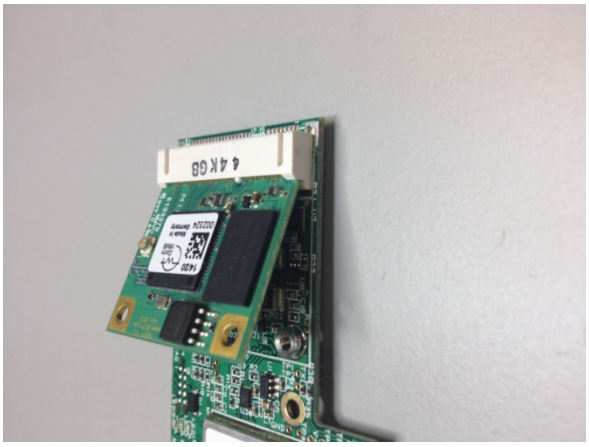


PCBA on to which the ASYDORINWLAN will be Secured using sliver screws (qty 2pc)



Insert ASYDORINWLAN (qty 1pc) into PCIe slot

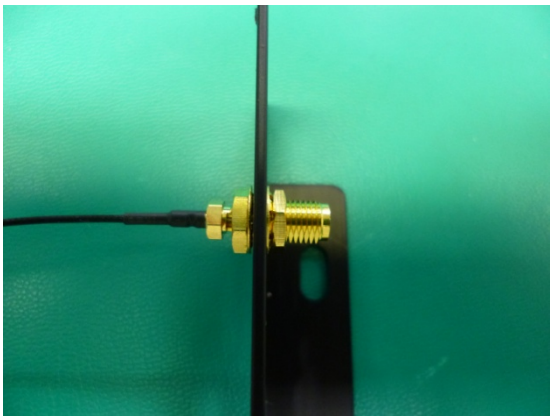
Insert ASYDORINWLAN in a 45˚ angle



After Inserting, depress slowly and secure with 2 screws onto PCBA

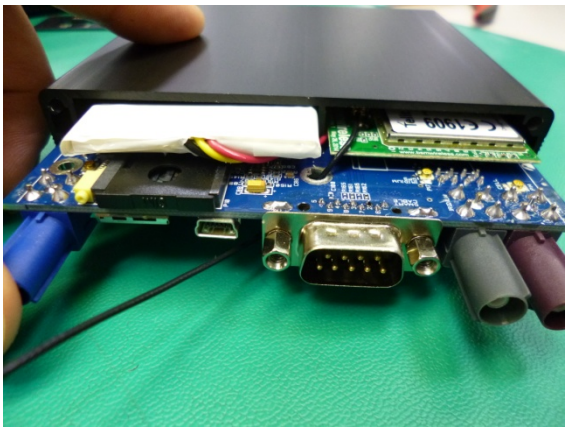
C	Assembly parts from process step A as shown in picture below.

Assy antenna cable (qty 1pc) & washer (qty 1pc) to Front cover plate (qty 1pc).

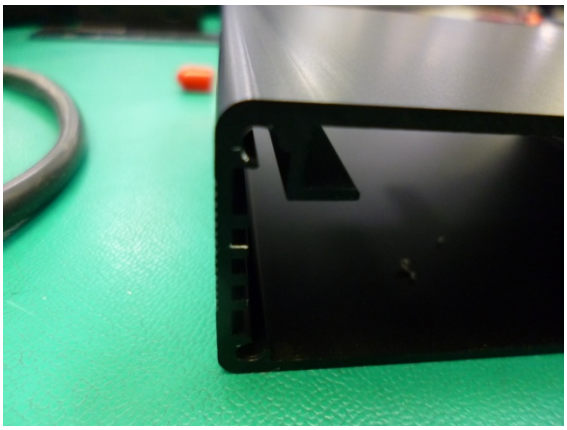


Insert antenna cable (qty 1pc) to PCIe wireless PCBA (before installing wire through the board need to drill mounting hole with a 0.128” bit).

Insert PCBA / Assy into Aluminum Chassis. Before assy remove box ID label from PCBA



PCBA needs to be inserted on top slot. Battery wires and antenna wires need to be clear from chassis.



Use black screws (4pcs) to secure plate to chassis.

Apply glue to PCBA /chassis in area highlighted in red.

Side note: SIM Card slot need to move freely

Use black screws (4pcs) to secure plate to chassis.

Install wifi Antenna.

D	Print & place FCC label. Use BOX ID label to print the correct label to the unit.

FCC ID : 2AC9T-DORIN16MB will be printed in the RED Highlighted box.

The top of the label is placed starting from end of the Antenna endplate on the flat smooth aluminum surface of the chassis. All components are contained within this aluminum chassis. More detailed pictures are available on the Internal and External photo document.

E	Antenna Electrical Specifications

Model:	ANT-2.4-CW-RAH
Center Frequency:	2.45GHz
Recom. Freq. Range:	2.35-2.60GHz
Wavelength:	¼-wave
VSWR:	≤ 2.0 typical at center
Peak Gain:	1.6dBi
Impedance:	50-ohms
Connector:	RP-SMA
Oper. Temp. Range:	–40° to +90°C

Electrical specifications and plots measured on 10.16 cm x 10.16 cm (4.00” x 4.00”) reference ground plane