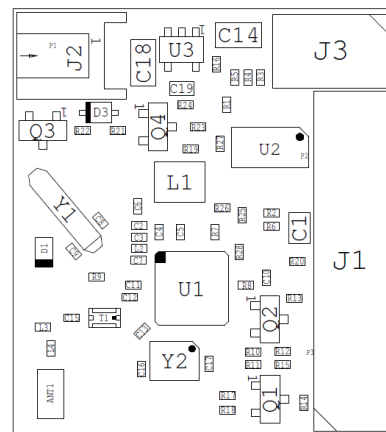


|                                              |            |                                                       |                 |
|----------------------------------------------|------------|-------------------------------------------------------|-----------------|
| <b>Robomow®</b>                              |            | <b>BLE robot board</b>                                |                 |
| <b>Origin date:</b>                          | 23.4.2013  | <b>P/N :</b>                                          | <b>ESB6007D</b> |
| <b>Version:</b>                              | V01.2      | <b>Edit by:</b>                                       | Omer S-T        |
| <b>Last update:</b>                          | 12.09.2013 | <b>Approved by:</b>                                   | Eli Levi        |
| K:\Engineering\Hardware\RS engineering files |            | <b>Document</b><br><b>Assy</b><br><b>Instructions</b> |                 |

## **Production process:**

1. SMT + Reflow at the C.S (C.S)
2. Visual inspection for shortages and stannous wave.
3. Cleaning
4. Separate the panel using V-Cut
5. Marking and labeling.
6. Electrical Test.
7. Packing and Shipment.



## **Appendixes:**

1. Changes control table
2. Quality control table

## **Special instructions and emphasize**

### **General**

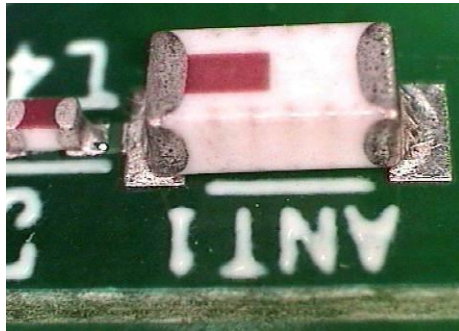
1. This electronic board should match **IPC-A-610D (Class 2)** standards. Those standards define criterions for Lead free board's assembly, SMT and T.H Placing, SMT, T.H, cables and manual soldering, mechanic assembly, cleaning, Coating and boards marking
2. First units test - Test first 2-3 boards electrically at the test station for every new batch

## **Production Process**

1. SMT and Reflow - C.S



**Caution:** See direction assembly of ANT1

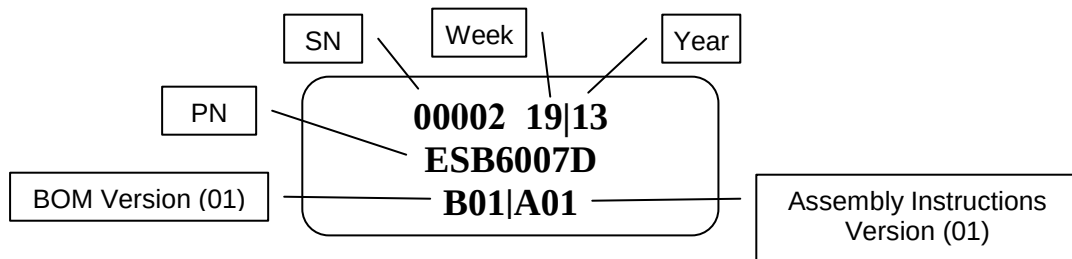


2. Visual inspection for shortages and stannous wave
  3. Cleaning
  4. Separate the boards from the panel using V-Cut
-

## 5. Marking and labeling

- a. Stick Product Identification label on P.S
- b. Label size: Sub-Contractor consideration.
- c. Label should include:
  - i. Item PN
  - ii. Board SN
  - iii. Year + Week

### Label Example Only:



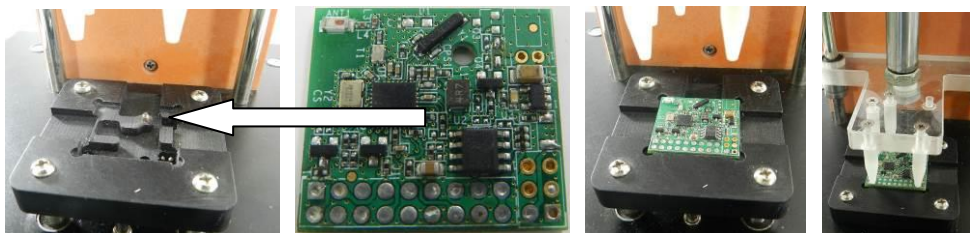
## 6. Electrical Test - TBD



6.1 Connect the Test Station to its Laptop (Watch pictures below).



6.2 Locate the BLE Board in the device and close it.



6.3 Open Test program by pressing on “**PC\_Bluetooth\_Toolkit**” icon.



6.4 Press “**GO**” to start the test.



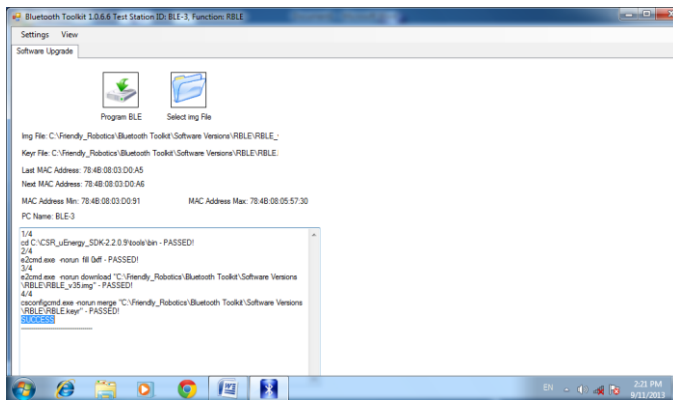
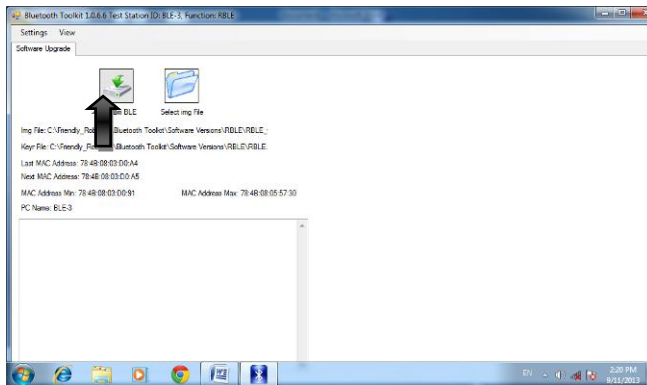
6.5 Press “**GO**” to upload new software version.



6.6 When LCD is up press “**GO**”



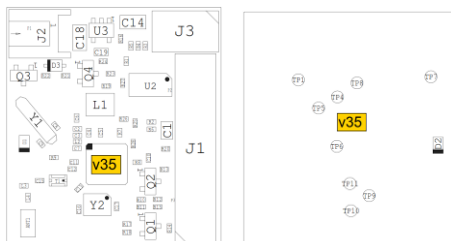
## 6.7 Press on “Program BLE” to upload the software.



“Passed” will appear on LCD for every successful test.



## 6.8 Attach “v35” labels to board's both sides after passed test. (Watch pictures below for labels location.)



## 7. Packing and Shipment - Need Friendly approval for Sub Contractor Packaging proposal

**Appendix 1: Control table for changes**

| Change Date | Version   | Change Description                                                                                                    | Remarks |
|-------------|-----------|-----------------------------------------------------------------------------------------------------------------------|---------|
| 22.4.2013   | V2        | 1.Adding coating<br>2. antenna direction instructions<br>3.CPS1 assembly picture                                      |         |
| 02.07.13    | B – V02.1 | [1] Touch Up soldering updated.                                                                                       |         |
| 09.07.13    | C – V01   | [1] LED,Con J1,Spacer removed from assy.<br>[2] Coating removed from assy. Board will be coated with ESB6100/ESB7000. |         |
| 08.07.13    | D – V01   | [1] CAP0067G removed from C14.                                                                                        |         |
| 12.09.13    | D – V01.1 | [1] Electrical test added to document.                                                                                |         |
| 12.09.13    | D – V01.2 | [1] x2 v35 labels after passed elec test.                                                                             |         |

**Appendix 2: Failure Control table**

| # | Date | Failure Description | Remark |
|---|------|---------------------|--------|
| 1 |      |                     |        |
| 2 |      |                     |        |
| 3 |      |                     |        |

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# Robomow® - FCC Compliance Statement

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:

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

## FCC Warning

Modifications not expressly approved by the manufacturer could void the user authority to operate the equipment under FCC Rules.

Warning: Insertion of a ESB6007D BLE Robot Board/RF Module into any host other than the RC306, CBS01, RS612, RS622, RS630, Robo Scooter 1800 and Robo Scooter 3000 invalidates the FCC ID of the ESB6007D BLE Robot Board/RF Module.

**RF Exposure Warning:** A distance of at least 10 centimeters between the equipment and all persons should be maintained during the operation of the equipment.

THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

### **FCC ID: 2ABHE-RB-1**

This device complies with Part 15 of the FCC Rules. 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.