QCT Rackgo X OCP Debug Card v2.0

Brief Specification

<Revision:1.0>

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Revision History

Revision	Date	Change Summary
1.0	2018/04/23	Product specification revision 1.0 release

CONTENT

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1. Overview

The brief product specification describes '' Rackgo X OCP Debug Card v2.0'' is intended to improve and replace the existing Bluetooth Debug card. It carries all the features of the existing Bluetooth debug card with more convenient use and compliance with current OPC product.

2. High Level System Features

Description	
Description	Rackgo X OCP Debug Card v2.0
DImension	
Dimension	70.55 mm(L)x48mm(W)x17.1mm(H)
Connector Interface	

Interface	1. USB 3.0 Connector with remapped proprietary singal pin
	  --USB2.0
	  --I2C
	  --PRSNT
	  --UART
	The USB3.0 connector will downgrade to support USB2.0 speed only
	2. Micro USB
	3. USB 2.0 type A connector

Human interface	
Human interface	--**Power/Reset/UART select button** --**5-way switch**: The 5 way switch allows the user to page up or page down through the debug information on LED panel --**Bluetooth on/off switch**: Turn the battery power on/off to enable/disable Bluetooth module.

Table 1 High Level System Features

Figure 1 Human Interface

3. Rackgo X OCP Debug Card v2.0 Block Diagram

The block diagram describes the high level functional block diagram of Rackgo X OCP Debug Card v2.0

Figure 2 Rackgo X OCP Debug Card v2.0 Block Diagram

Figure 3 UART Block Diagram

4. Mechanical Dimension

Figure 4 Mechanical Dimension
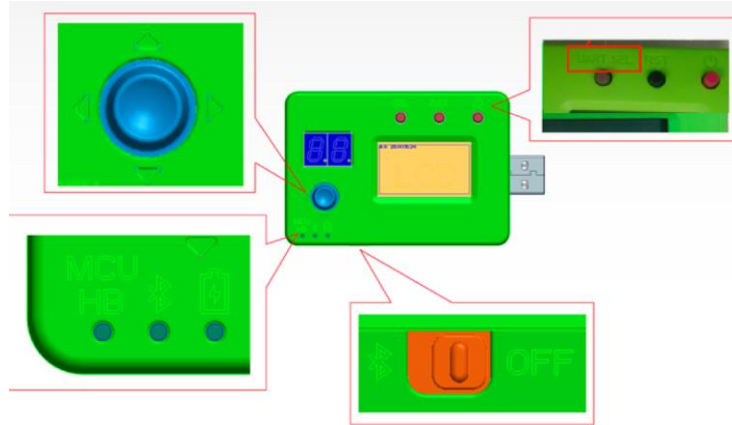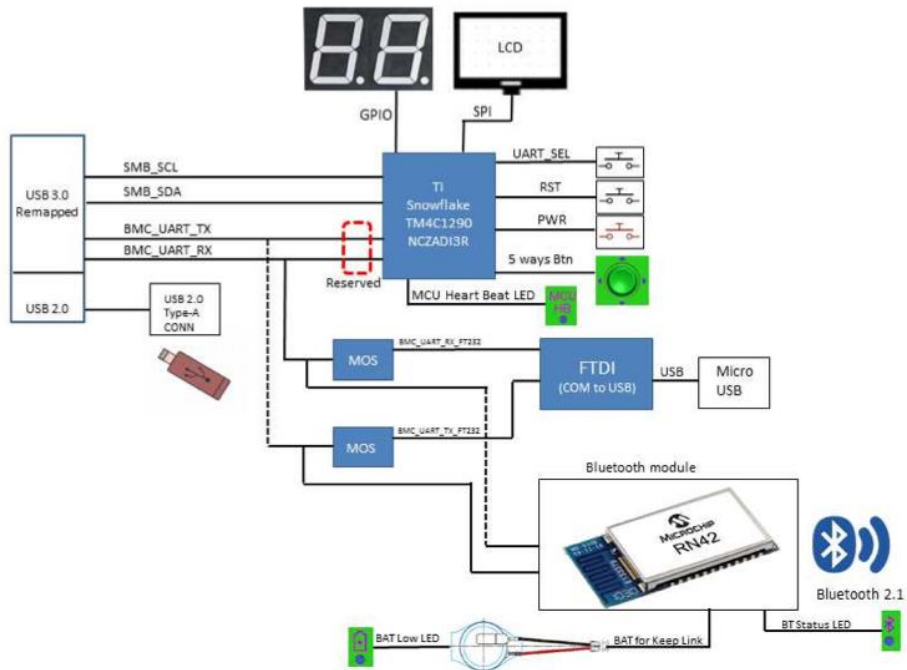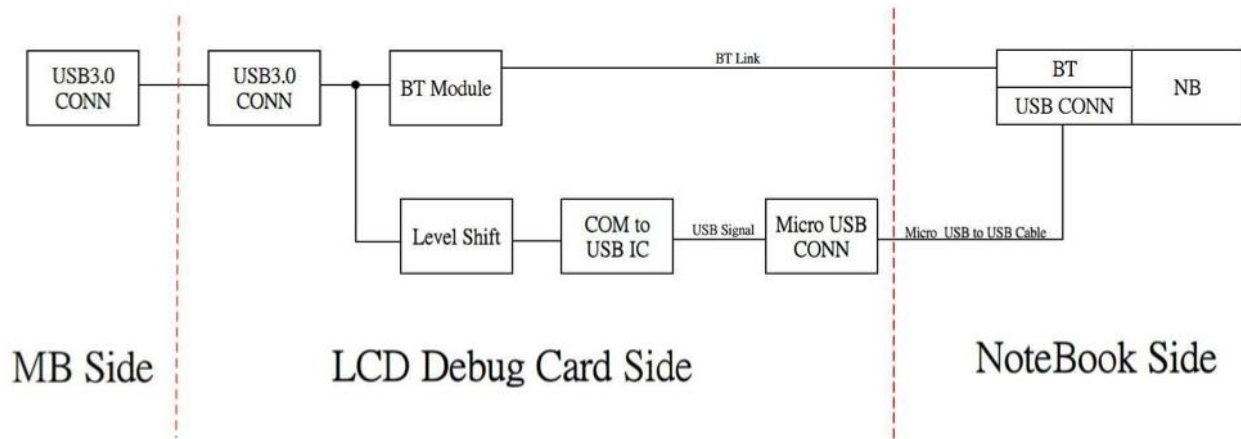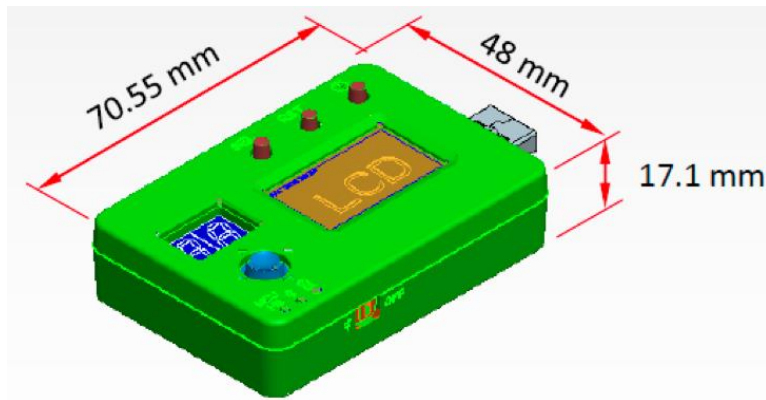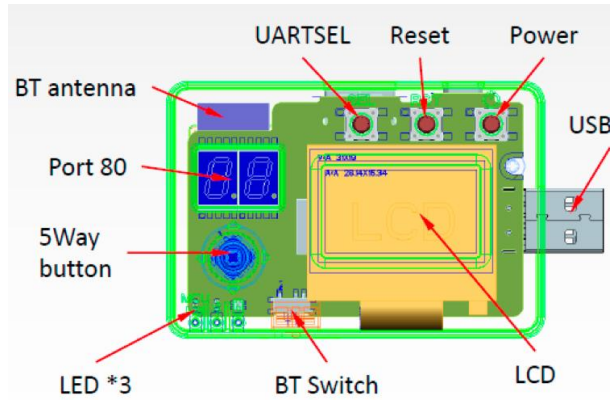
5. Component Placement

The key part placement of Rackgo X OCP Debug Card v2.0 is shown as below:
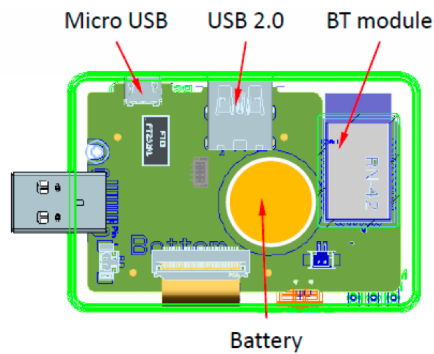
Top side:

Bottom side:

Figure 5 key part placement

6. OCP Tenets/Principle

- **Efficiency**
  - To Integrate debug utility & debug message into one small box without separated utilities and extra effort
  - Reserve more front end IO space for more critical IO expansion
- **Scalability**
  - Comply with common debug protocol, like UART, USB, and
- **Openness**
  - Derive from debug card V1 and with enhanced features
- **Impact**
  - Readable LED & LCD to accelerate the progress of debugging

7. Reference

- Facebook_OCP_Debug_Card_with_LCD_Spec_v1p0