RSL10-COIN-GEVB

RSL10-COIN-GEVB Programming

RSL10-COIN-GEVB is a Bluetooth[®] beacon board featuring RSL10, the industry's lowest power Bluetooth 5 SoC, and NCT375, a temperature sensor. This board is battery powered and advertises temperature, battery voltage and URL as advertising/beacon packets.

Brief Beacon Enablement Instructions

- To allow third party app installation on Android phones please go to *Settings* → *Security* and enable "*Unknown Sources*".
- Access the beacons by going into the *Nearby* section of your phone. Please select *Settings* → *Google* → *Nearby*
- Note <u>AND9710/D</u> on <u>www.onsemi.com</u> describes Eddystone beacon applications with RSL10.

Eddystone Beacon software is preloaded onto the board and advertises ambient temperature from sensor device NCT375, battery voltage and URL link <u>www.onsemi.com/idk</u> Advertising interval is set to 2 s.

Source code of the beacon software, *Eddystone_TLM_URL_sleep* can be downloaded from <u>http://www.onsemi.com/PowerSolutions/</u>evalBoard.do?id=RSL10-COIN-GEVB.

This workspace can be imported easily into RSL10 SDK, which can be downloaded from <u>http://www.onsemi.com/PowerSolutions/</u>evalBoard.do?id=RSL10-002GEVB.

TLM and URL frames can be captured by generically available beacon apps. Examples on *Android OS include* Beacon scanner, Beacon Toy, Beacon manager, Beacon simulator (Figure 1).



Figure 1. Various Generic Beacon Apps Supporting Android OS



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EVAL BOARD USER'S MANUAL



To modify the preloaded FW, please follow the below instructions to flash new code:

1. Insert coin battery into the socket per following picture:



2. Install RSL10 development tools and launch the Flashloader.exe. Include the path of the hex file you plan to flash into the coin

(e.g. Eddystone_TLM_URL_sleep.hex)

🔍 Flash Loader	- • ×
<u>Eile H</u> elp	
Program Tools Options	
Filename: k_envsens\Debug\NCT375_reak_envsens.hex	Browse
Erase all of flash before programming	
 Verify contents of flash after programming 	
<u>Program</u> ⊻erify	

3. Connect Jlink Ultra+ with needle adapter Tag Connect, TC2050–IDC to CON1 of the board and hold it. Two green LEDs of Jlink have to be ON.



- 4. When connected just click PROGRAM button of Flashloader terminal application as described in step 2.
- 5. After flashing, green LED1 should blink for 2 s. If not, press the reset button on the Coin board.

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