MasterSlaveSwitch

Bluetooth Low Energy Wiki Main Page [1]

MASTER SLAVE SWITCH

This example demonstrates the ability of the CC254x with 1.2 stack to switch roles between master and slave. The example is based off of SimpleBlePeripheral project and adds in components from SimpleBleCentral. The roles can be switched multiple times.

Requirements

- CC2540KeyFob
- Texas Instruments Stack 1.2 which can be downloaded at ti.com/blestack
- · CC Debugger

Project Files

http://processors.wiki.ti.com/index.php/File:BLE-CC254x-1.2_masterSlaveSwitch2.zip

Operation

- Flash two keyFobs with the same image.
- The keyFobs will power up and advertise. Press left button on keyFob#1 to change its role to master and connect to keyFob#2.
- The source code sets the address to 0xFFFFF3. For a signal connection, it is OK to have same address on both.
- The left button will switch roles.
- · Red Led blink indicated advertising mode
- · Green led indicates connected mode or scanning
 - Slave will blink once when connected
 - Master will blink 1 + number of connected devices (max 3)

File Modification

• The addresses to connect to are hard coded in. To change this set modify the following code in MasterSlaveSwitch.c

```
//devices the central will try and connect to
uint8 addr1[6] = \{0xFF,0xFF,0xFF,0xFF,0xFF,0xO2\};
uint8 addr2[6] = \{0xFF,0xFF,0xFF,0xFF,0xFF,0x03\};
uint8 addr3[6] = \{0xFF,0xFF,0xFF,0xFF,0x04\};
```

• The only profile which requires modification is peripheral.c., to remove a check for gapRoleInit.

References

[1] http://processors.wiki.ti.com/index.php/Category:BluetoothLE

Article Sources and Contributors

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