CC32xx Provisioning WPS Application

Overview

The example code demonstrates how to use WPS Wi-Fi provisioning with CC31xx. It demonstrates two options available to be used with WPS:

- "Push button"
- "PIN code"

Application details

The application performs the following steps:

- Initializes the device networking layers.
- The AP SSID is "cc3200demo". The SSID can be changed by changing the macro

```
#define SSID_NAME "cc3200demo"
```

- Initiates connection to WLAN AP with WPS security, using Push Button method.
- Once connected, the RED LED turns ON.
- After a delay, the application disconnects from the AP. The the RED LED is turned OFF.
- Initiates connection to WLAN AP with WPS security, using PinCode method. The default pin code is 88664422.
- Once connected, the RED LED turns ON.
- After a delay, the application disconnects from the AP. The the RED LED is turned OFF.

Source Files briefly explained

gpio_if - Basic GPIO interface APIs. Used to control the RED LED.
main - Initializes the device, connects to a AP using WPA (PushButton), disconnects from AP, connects to a AP using WPA (PinCode), disconnects from AP
pinmux - Assigns a personality to the pins at the device boundary
startup_* - Tool specific vector table implementation

Usage

1. Choose an AP that supports WiFi provisioning using WPS (Push Button as well as Pin Code).
2. Connect to the AP from a laptop and open the AP webpage (For ex., http://192.168.1.1 [1] and then entering the admin-password details).
3. Run the reference application (Flashing the bin/IAR/CCS).
   - Open the Project as mentioned in the 'docs\CC3200-Getting Started Guide.pdf'
   - Build and download the application to the board
4. On running the application, the device waits for a connection using the WPS (PushButton) mode.
5. Press the WPS pushbutton on the AP. This can also be simulated on the webpage of the AP (if supported).
6. Once connected, the RED LED turns ON. After a while the RED LED turns OFF after disconnecting from the AP.
7. Now the device waits for a connection using the WPS (Pin code) mode.
8. Enter the PIN Code 88664422 in the webpage of AP to establish a WPS connection.

9. Once connected, the RED LED turns ON. After a while the RED LED turns OFF after disconnecting from the AP.

Limitations/Known Issues

None.

References

[1] http://192.168.1.1

Article Sources and Contributors

CC32xx Provisioning WPS Application *Source*: http://processors.wiki.ti.com/index.php?oldid=178205 *Contributors*: A0221015, Codycooke, Jitgupta, Malokyle

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