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"

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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

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