OTA Feedback

# 1: Test CRC Check Function

## 1.1 Modify the DFU code to force report CRC check error

The test code added as below red line.

static void on\_dfu\_evt(ble\_dfu\_t \* p\_dfu, ble\_dfu\_evt\_t \* p\_evt)

{

 uint32\_t err\_code;

 switch (p\_evt->ble\_dfu\_evt\_type)

 {

 case BLE\_DFU\_VALIDATE:

 err\_code = dfu\_image\_validate();

 // Translate the err\_code returned by the above function to DFU Response Value.

 ble\_dfu\_resp\_val\_t resp\_val;

 resp\_val = nrf\_error\_to\_dfu\_resp\_val(err\_code, BLE\_DFU\_VALIDATE\_PROCEDURE);

 // [ Add by Daniel to force report CRC check fail.

 resp\_val = BLE\_DFU\_RESP\_VAL\_CRC\_ERROR;

 // ]

 err\_code = ble\_dfu\_response\_send(p\_dfu, BLE\_DFU\_VALIDATE\_PROCEDURE, resp\_val);

 APP\_ERROR\_CHECK(err\_code);

 break;

## 1.2 Test process.

(a): Clear device -> Burn in S110 v7.0 ->Burn in DFU code.

(b): Device will keep in DFU mode for no valid application

(c): Run normal Firmware upgrade.

## 1.3 Test Result

iPhone “nRF ToolBox” 🡪 Pass.

Updater will show CRC Error message, DFU device will timeout and keep in DFU mode in next power up.

Master Control Panel v3.5.1.8299 🡪 Fail

No error message shown in Master Control Panel UI, FW upgrade finish as normal, and Device will go to application.

## 1.4 Discussion

From above test result, the Master Control Panel isn’t did CRC check. So there have risk to cause problem if CRC check fail really happen.

We want a fix for our production line is use Master Control Panel to do FW upgrade.

## 1.5 Related Information

**(a): DFU code Information**

Based on …\s110\_nrf51822\_7.0.0-3.alpha\_STD\Examples\DFU, already send the whole source code to Jason and Jimmy

**(b): Master Control Panel version information**



**(c): Complier version**

