

BU-500
2.4G band
Up Converter and PA

Spec

- RF-in <1 GHz
- Local Oscillator: **Default:1693MHz**
 - 85MHz to 2700MHz (configurable)
 - **When bundled with HV-330A, default LO:1693 MHz**
- RF-output: 2400~2500MHz
- Gain: +25~+40 dB depending on the RF-out frequency
- Max. 2.4G PA output power, >+20dBm (>100mW)
- DC power adaptor: 12V 1A

Test Result

LO=1693MHz

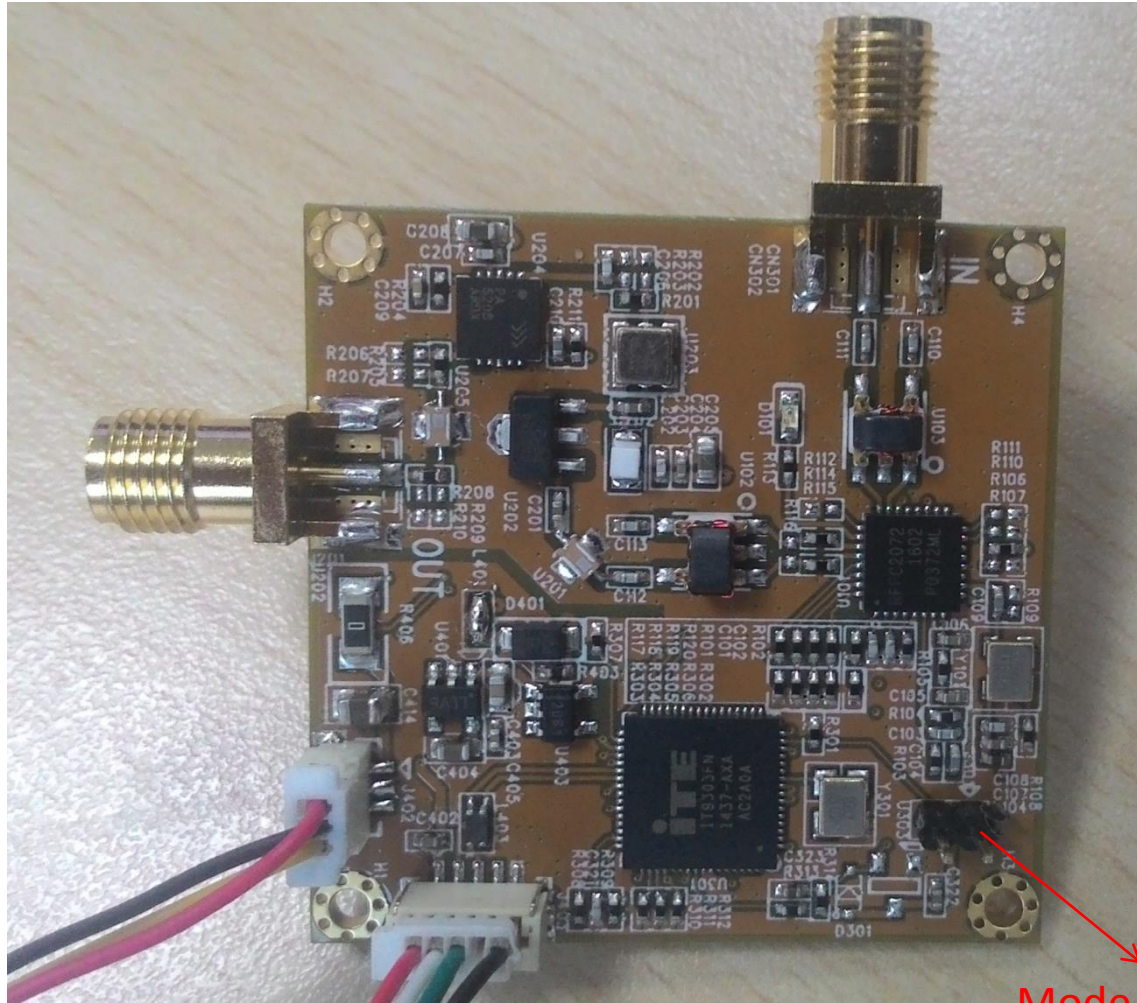
RF-in Freq (MHz)	RF-in Pin (dBm)	LO Freq (MHz)	RF-Out Freq (MHz)	RF-out Pout (dBm)	Power Current (A)	*Gain
707	-12	1693	2400	~20	~0.35	32 dB
757	-20	1693	2450	~20	~0.35	40 dB
807	-7	1693	2500	~20	~0.35	27 dB

*Because of the 2.4G saw filter, the gain is the highest around 2.45G.

Test Result

LO=1970MHz

RF-in Freq (MHz)	RF-in Pin (dBm)	LO Freq (MHz)	RF-Out Freq (MHz)	RF-out Pout (dBm)	Power Current (A)	Gain
430.5	-12	1970	2400.5	~20	~0.35	32 dB
432.5	-12	1970	2402.5	~20	~0.35	32 dB
434.5	-12	1970	2404.5	~20	~0.35	32 dB
436.5	-12	1970	2406.5	~20	~0.35	32 dB



RF-IN

RF-out

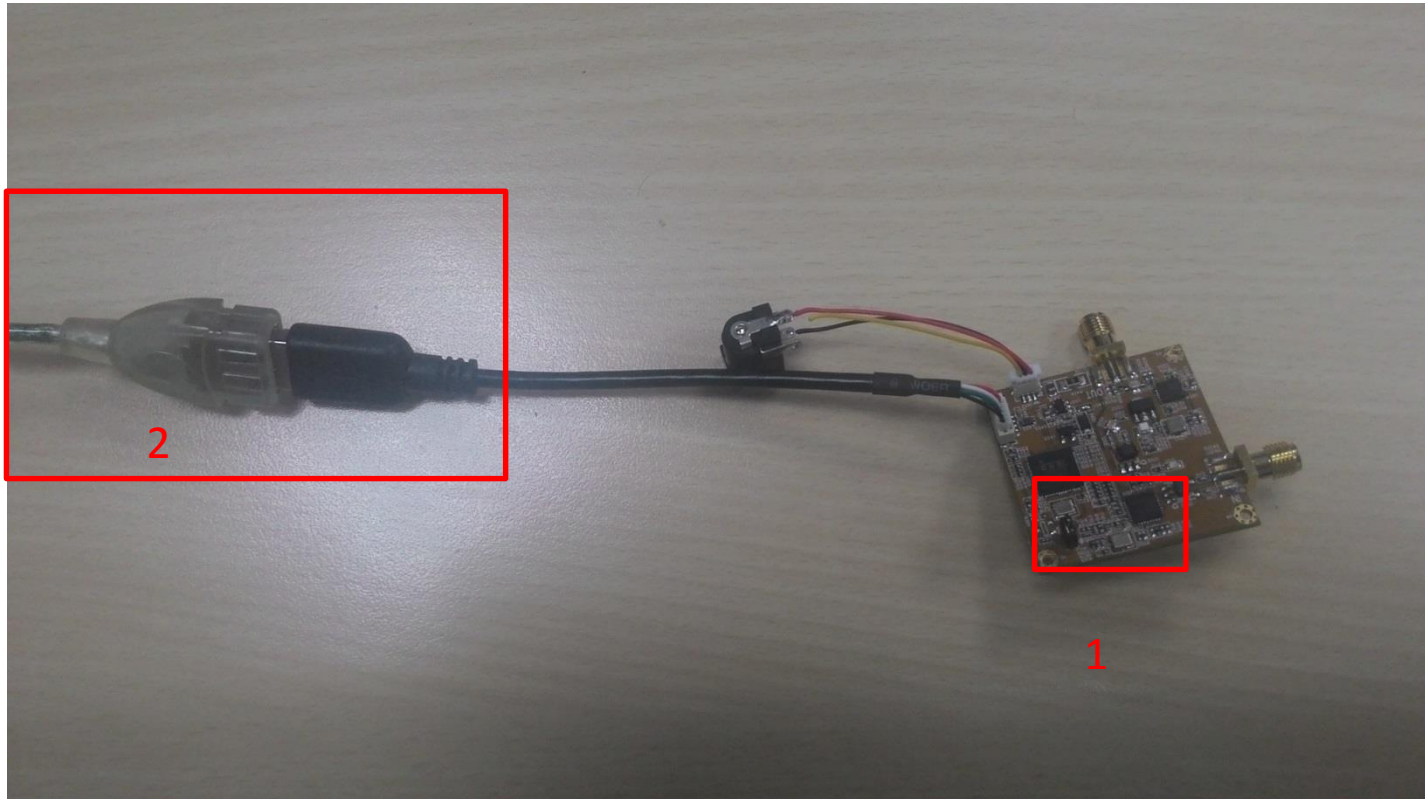
DC-in
12V/1A

USB config

Mode switch
Normal mode: open
USB Config mode: short

Config LO

- 1. Set (short) jumper for config mode
- 2. Connect USB to a PC laptop
- **Note: don't connect 12V DC**










Install Driver

- Run Drvinstall.exe (in \Windows_Driver_v16.04.20.1_itesign) to install driver for the first time.

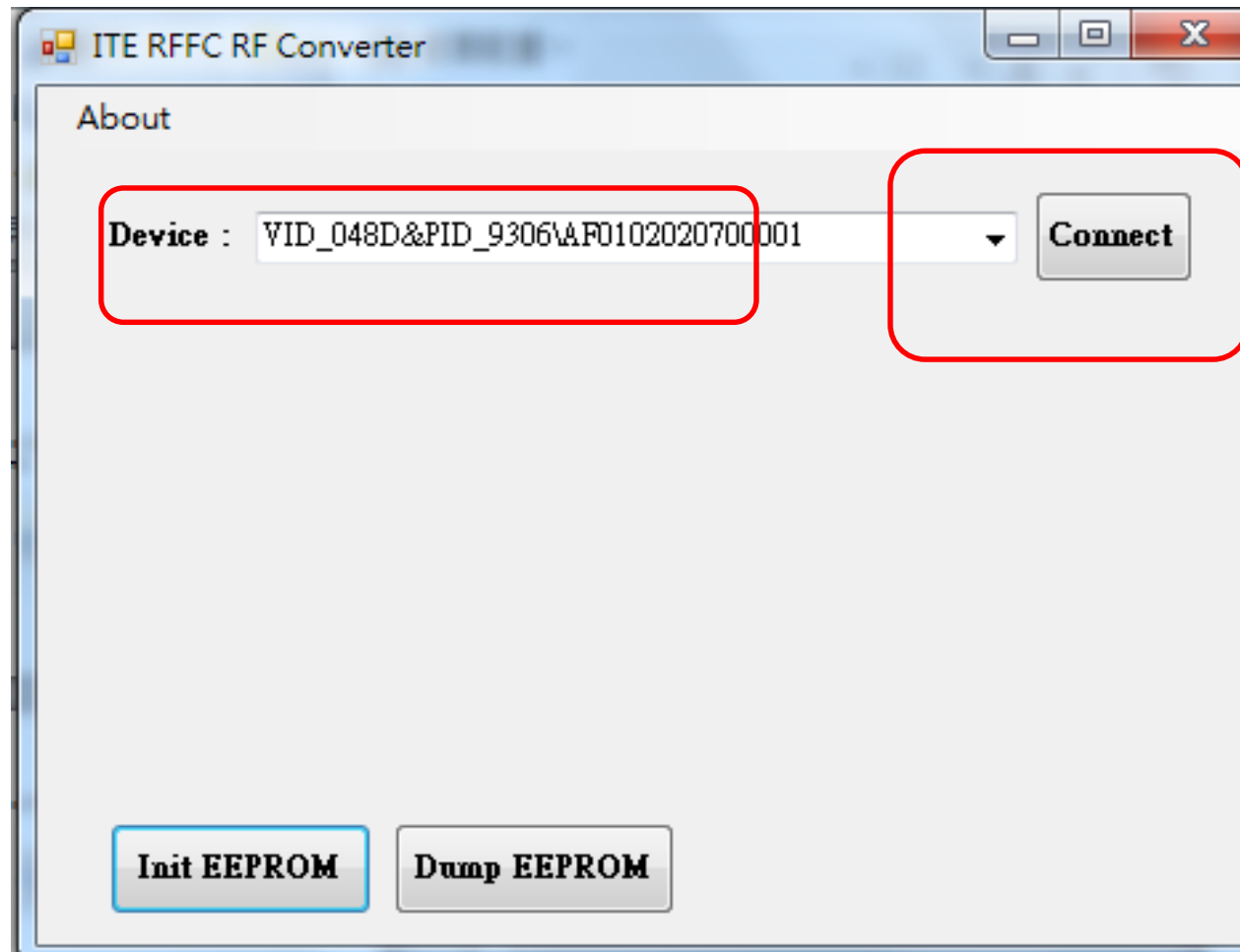
名稱	修改日期	類型	大小
x64	2016/7/7 下午 07...	檔案資料夾	
x86	2016/7/7 下午 07...	檔案資料夾	
DrvInstall.exe	2016/4/20 上午 1...	應用程式	9,889 KB
DrvUninstall.exe	2016/4/20 上午 1...	應用程式	9,889 KB
ReleaseNote.txt	2016/4/20 上午 1...	文字文件	14 KB

Run Config tool

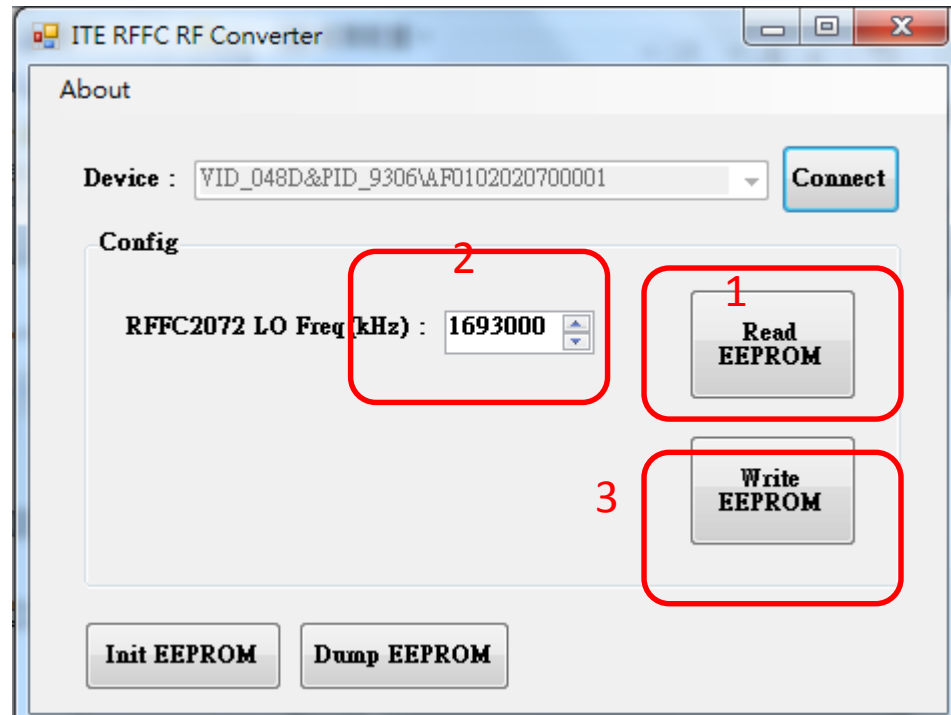
- Run RFFC_RF_Convert_Controller.exe

 Windows_Driver_v16.04.20.1_itesign	2016/7/7 下午 07...	檔案資料夾	
 inpout32.dll	2013/2/25 上午 1...	DLL 檔案	32 KB
 ITEAPIEX.dll	2014/10/8 下午 0...	DLL 檔案	124 KB
 RFFC_RF_Convert_Controller.exe	2016/7/7 上午 11...	應用程式	120 KB
 RFFC_RF_Converter_Image.bin	2016/7/7 上午 11...	VLC media file (...)	64 KB
 WinIo.dll	2013/2/25 上午 1...	DLL 檔案	48 KB
 WinIo.sys	2013/2/25 上午 1...	系統檔案	5 KB

- If the device is detected correctly, Click on “Connect”



- 1. Read EEPROM
- 2. Set new LO frequency
- 3. Write EEPROM



Back to Normal mode

- Unplug USB
- Remove the jumper, back to normal mode

