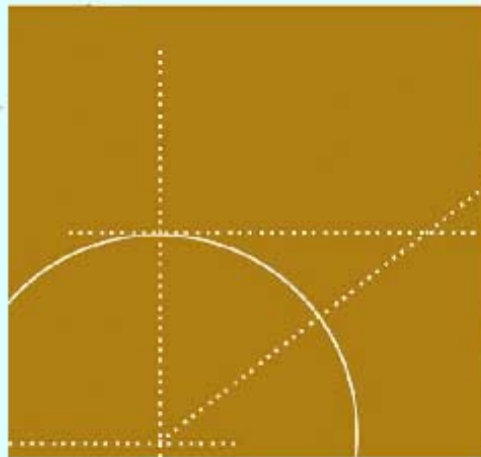




Cirocomm, the Future is Wireless



REV 1.0

GPS Receiver/CT-5530 Application Note

Firmware Update Procedures

This document describes the procedure for updating the CT5530 module with new firmwares.

September 4th, 2003

Johnny and Fred

Cirocomm.

AN07CT55300-050

How to update the CT5530 with new firmware

A: Connections

1. I/O Connector Pins :

CT5530 Pin Configuration

Pin No.	Symbol	I/O	Description
1	Vbattery	I	Battery backup power
2	VANT	I	Antenna bias DC Power Supply
3	AVDD	I	Analogue Power Supply
4	DVDD	I	Digital Power Supply
5	TX0	O	UART Port 0, Transmit Data
6	RX0	I	UART Port 0, Receive Data
7	RESET	I	Module reset input
8	1 PPS	O	1 PPS signal output
9	GPIO [6]	I/O	General Purpose I/O
10	GND	Ground	Power and signal ground
11	GPIO [7]	I/O	General Purpose I/O
12	GPIO [8]	I/O	General Purpose I/O
13	GPIO [11]	I/O	External Wake-up, Interrupt input
14	GPIO [15]	I/O	Boot Mode Select, 1:FLASH, 0:UART/SPI
15	GND	Ground	Power and signal ground
16	GND	Ground	Power and signal ground
17	GND	Ground	Power and signal ground
18	RFIN	I	RF input
19	GND	Ground	Power and signal ground
20	GND	Ground	Power and signal ground

* Pin 14 was assigned to the GPIO[15]. In order to update the module with new firmware, GPIO[15] needs to be grounded. Only ground GPIO[15] during firmware updates.

2. Connect TX0 、RX0 、DVDD 、GND :

Make connections between TX0/RX0 and the COM port on PC through RS232 interface.

3. Window O.S.

The update software (uFlash) only works under Window NT/ Win 2000/Win XP/Win98.

4. Update

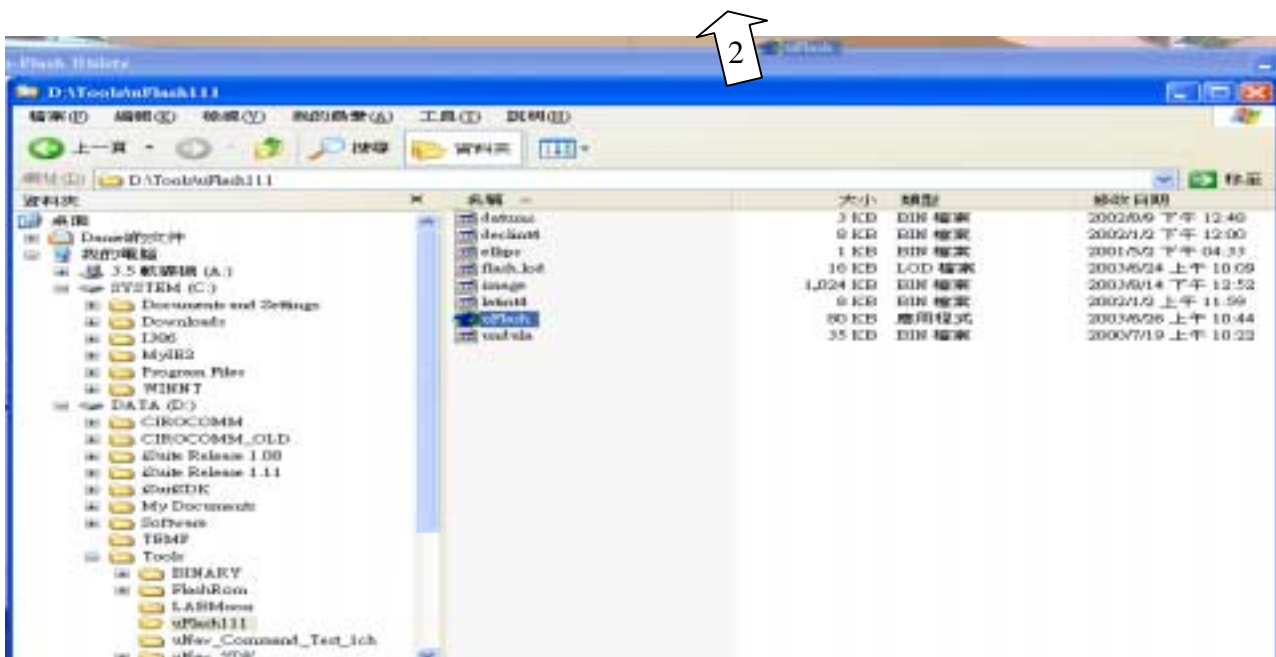
Reference : B. uFlash operation instruction.

5. Completion

Upon completion of firmware update, make sure the state of GPIO[15] is floating ◦

B. uFlash Operation Instruction :

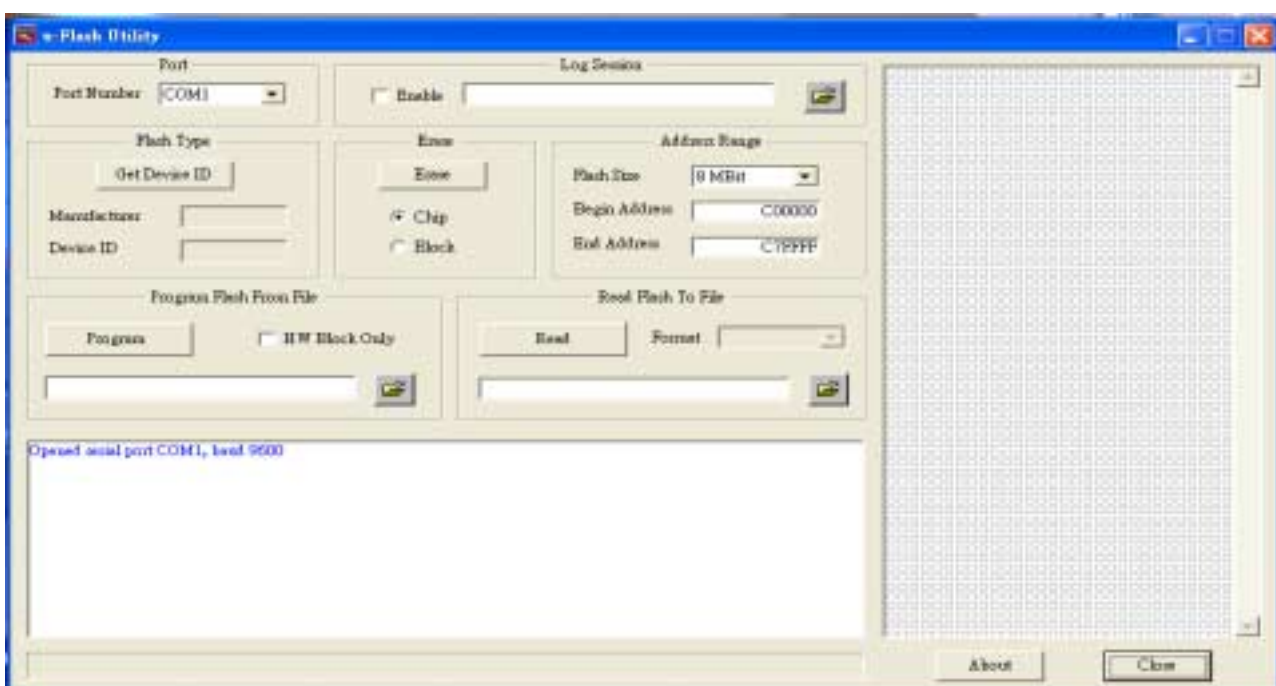
1. Copy the contents of the uFlash111 folder to a desired directory (eg : D:\ tools\)
2. Make a shortcut to “uFlash.exe” on the desktop.



3. The following icon will appear on the desktop.

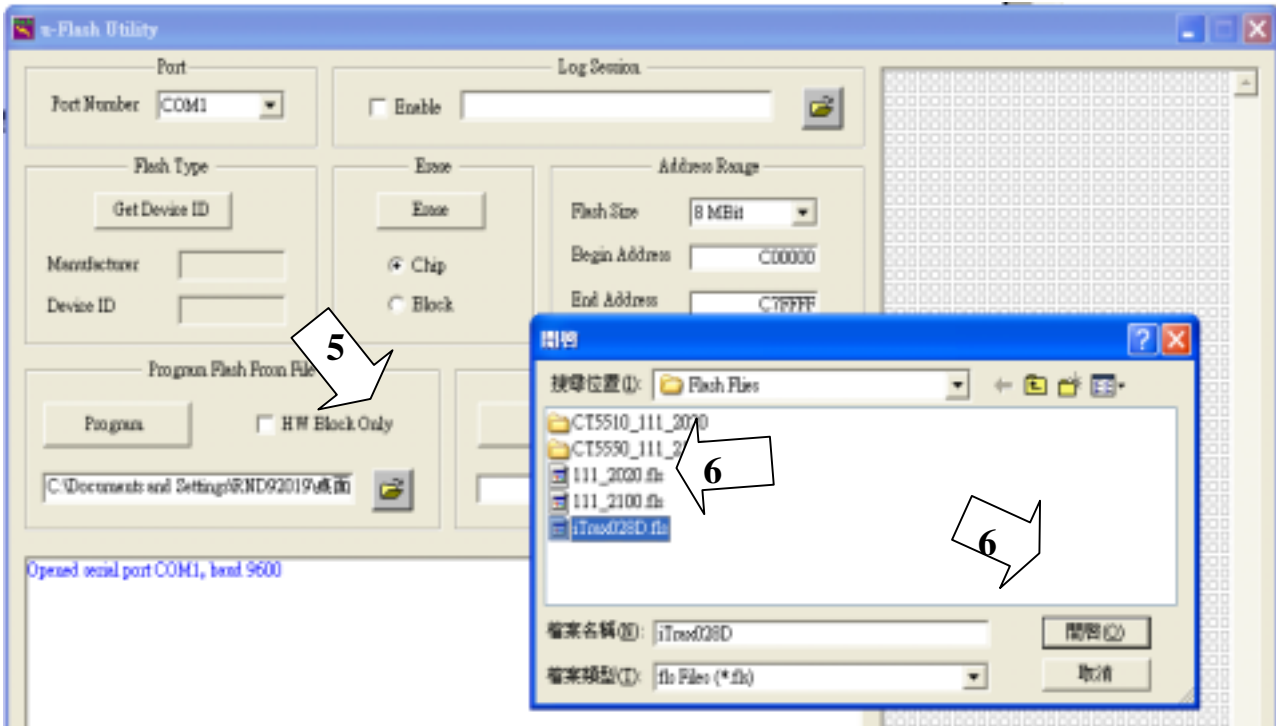


4. Double click the shortcut icon, the uFlash Utility program will start running.

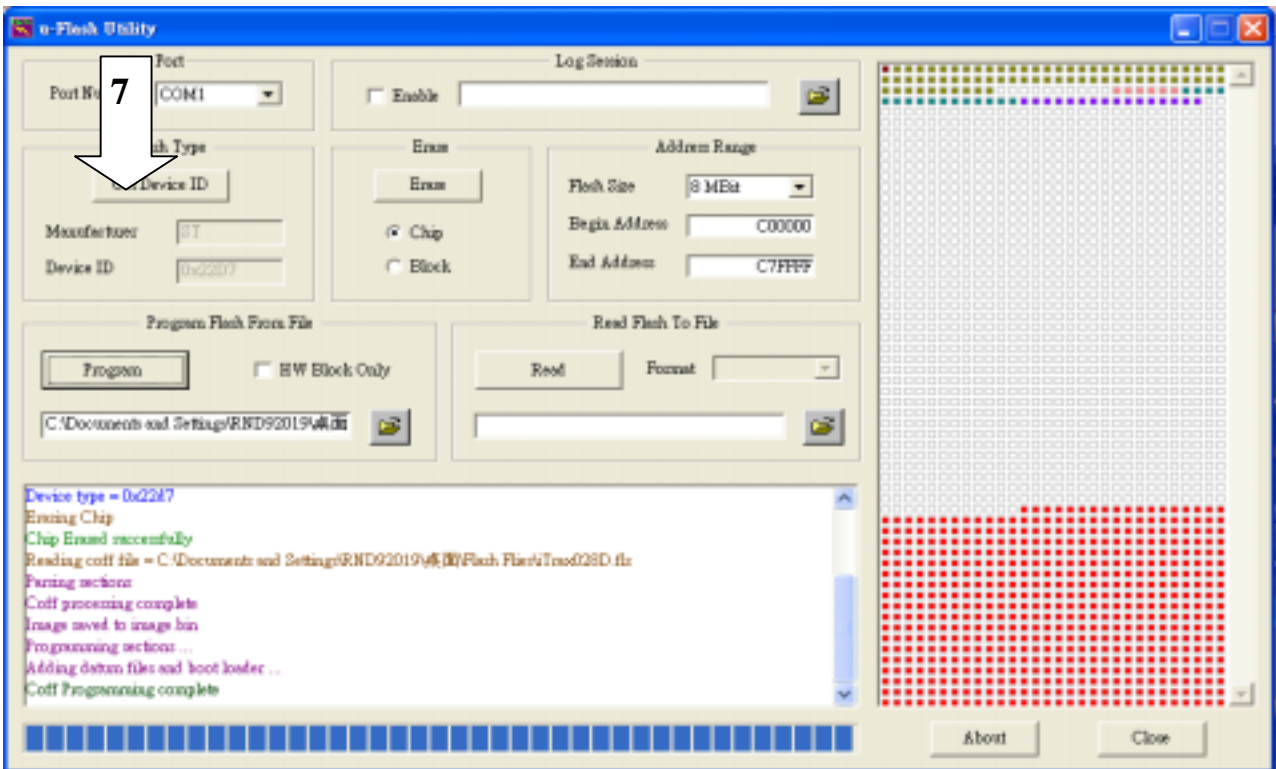


5. Click the open file button.

6. Select the file name for the new firmware, with a *.FLS extension.



7. Upon clicking of the “Program” button, the program will enter the programming status state. The power of the module need to be turned on and GPIO15 being grounded within 8 seconds for programming to start. If a warning message or error message appears, you have to make sure the power to the module board is turned off and the RS232 connection is correct. Furthermore, the position of Port0 SW needs to be correct.



ENDING