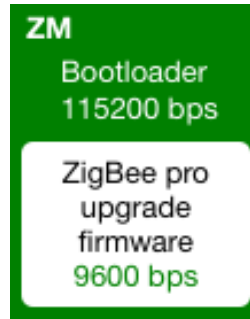


## Upgrade ZigBee Module Firmware

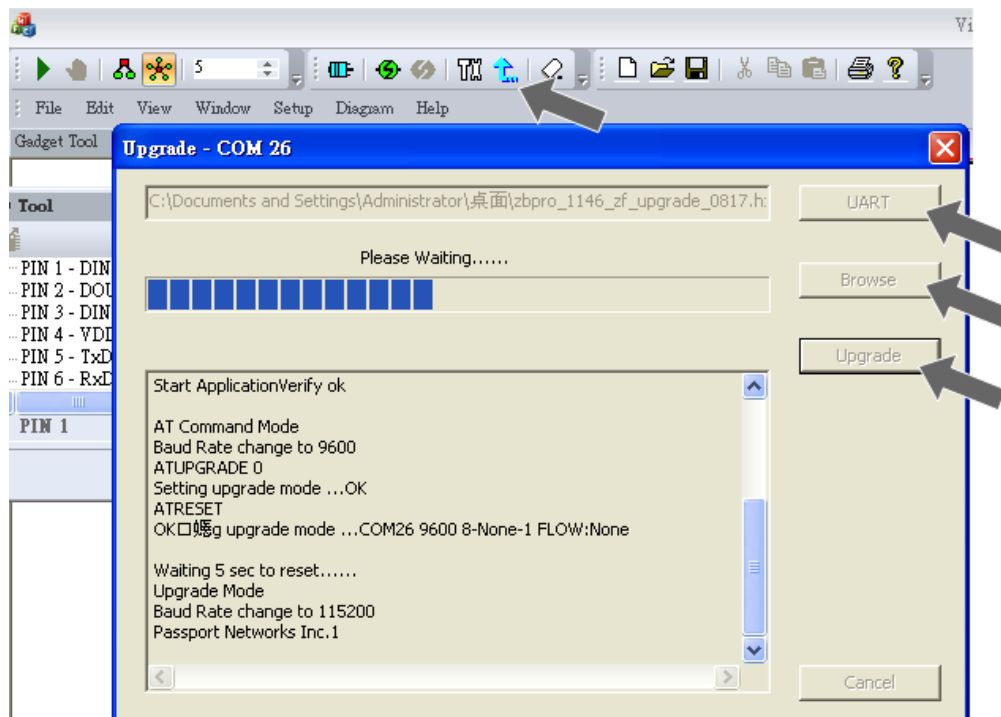
ZM firmware consists of two components: bootloader and ZigBee pro upgrade firmware (figure 1). The preset baud rate for bootloader is 115200bps and ZigBee pro upgrade firmware 9600bps. This guide will assist user in upgrading the ZigBee pro upgrade firmware.

Figure 1. ZigBee Module



## Upgrade ZM Firmware (Evaluation Kit board and UZport)

- Connect ZM to PC through evaluation kit board or UZport
- Click upgrade button on the top menu

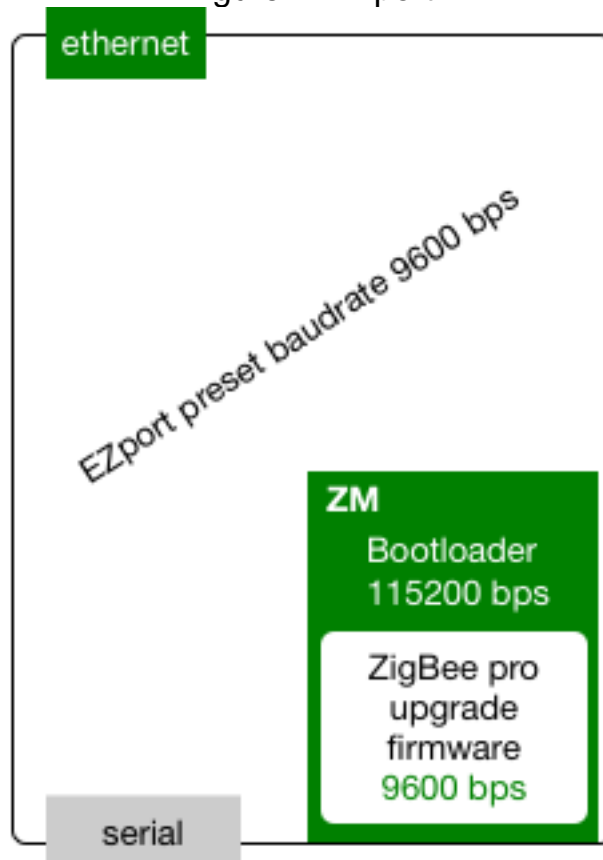


- Click UART select the corresponding COM port, with baudrate: 9600, byte size: 8, parity: none, stop bits: 1
- Click Browse and locate the hxf upgrade file
- Click Upgrade and wait till the status bar is complete

## Upgrade ZM Firmware on EZport

There are several approaches to upgrade ZigBee Module on the EZport. Here we will demonstrate one approach using virtual COM.

Figure 2. EZport



### (EZPORT UPGRADE to work around)

*The purpose of this approach is open two COM ports: One Virtual COM through the Ethernet port using VisualManager and the other serial COM through Terminal program. We will use the serial COM to allow ZM to enter into Bootloader and use Virtual COM from VisualManager to do the remaining upgrade procedures.*

- Connect both ethernet and serial to PC
- Use ESport Manager, open 1 virtual COM on port channel 4001 (ZigBee

port)

- Using VisualManager to open the Virtual COM
- Using Hyper Terminal to open serial COM (baud rate 9600)

#### **On Visual Manager**

- On VisualManager top menu, click upgrade
- Click UART choose VirtualCom port and 9600
- Click Browse and select the upgrade hxf file

#### **On Hyper Terminal**

- type in ATupgrade 1, enter
- type in ATreset, enter

(This allows the ZM to enter into Bootloader and ready for upgrade.)

#### **On Visual Manager**

- Click Upgrade

The upgrading progress can be viewed in VisualManager's progress bar and at the same time characters will be displayed in the other Hyper Terminal window.

Since the upgrade procedure is done at baud rate 115200bps in the Bootloader and the original Hyper Terminal window is opened at 9600bps, the characters transferred will not be shown correctly.

### **Upgrade Failure**

If upgrade fails and wasn't able to reset the ZM to its original settings. Try connecting ZM from Terminal program and setting the UART baudrate as 115200. The ZM could have already entered into the Bootloader mode and wasn't able to return to the original "ZigBee pro upgrade firmware" mode. In this case, we need to manually exit the Bootloader mode.

Open Terminal window with baud rate 115200:

- When it asks *Start upgrade? (Y/N) Bootloader version 1.01*, enter N (even if you can't see the message in the window, type N)
- disconnect Terminal connection reset baudrate to 9600, then reconnect
- type in ATupgrade 0, enter
- type in ATreset, enter

ZM should now stay in ZigBee pro upgrade firmware mode. Retry Upgrade!