Conext Three Phase Inverters

How to upgrade the Comm and DSP firmware

2014-06-22

Schneider Electric

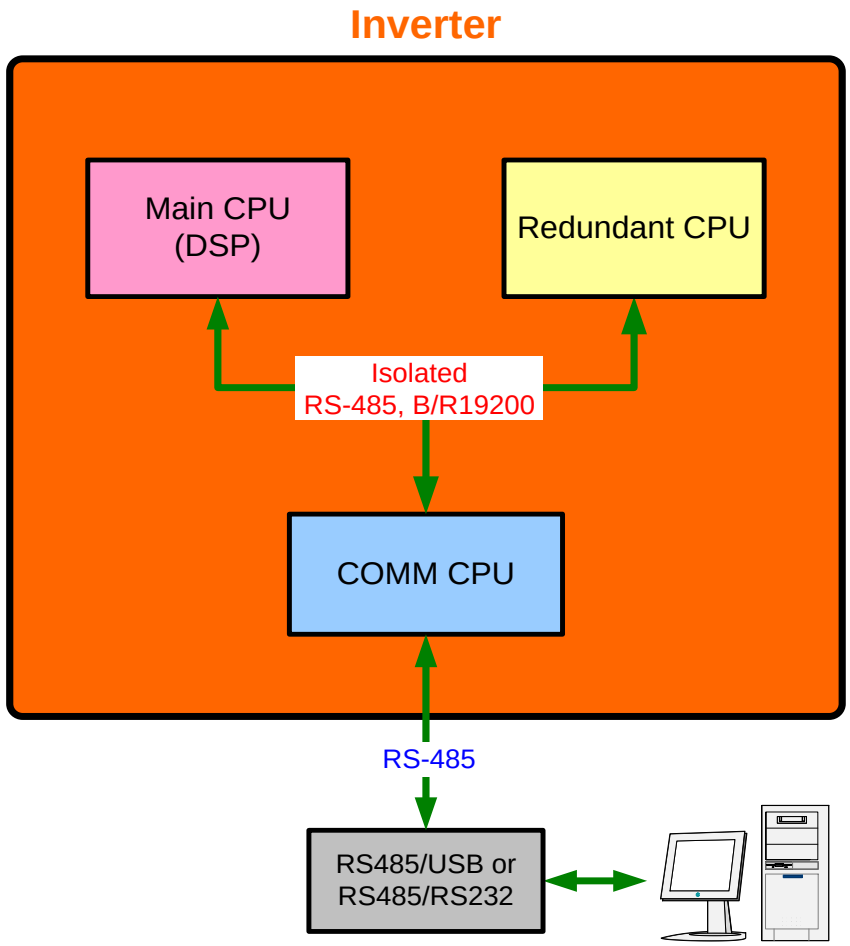
How to upgrade firmware

- Overview
- Provide power to inverter – Either DC or AC
- Upgrade by PC or Notebook

Overview

Note:

- There are 3 CPUs inside the inverter
- Upgrade DSP or Red., the data must go through the COMM CPU
- Upgrade B/R is fixed at 9600



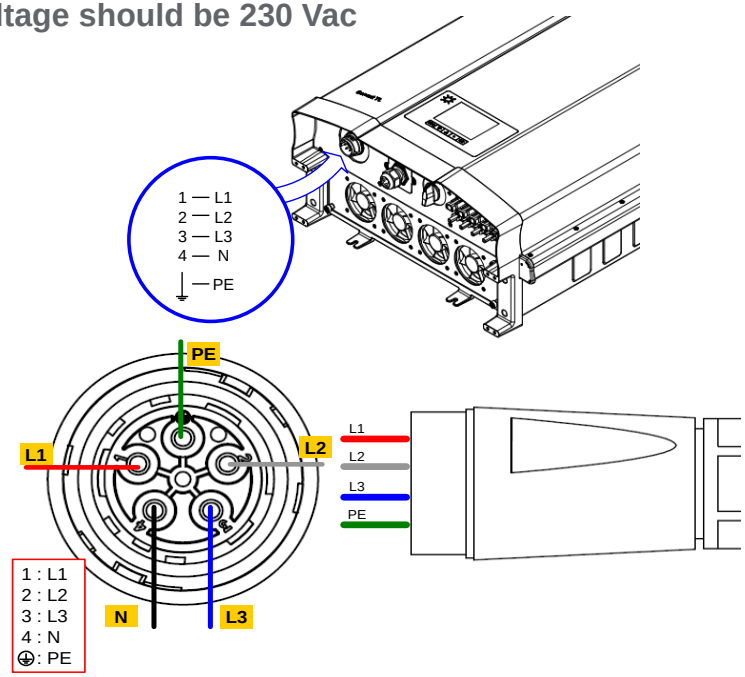
Steps to Upgrade:

Step 1 - Provide power to inverter

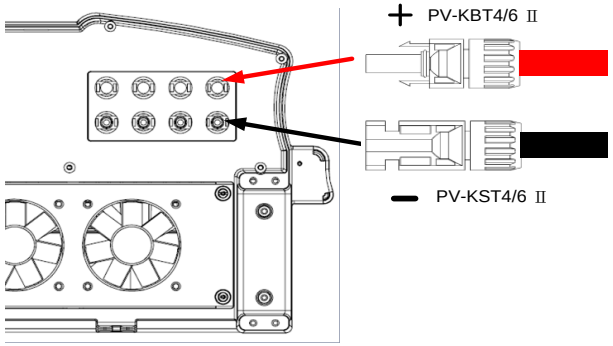
Either DC or AC. Only one is required

DC Input voltage should be > 200 Vdc

AC voltage should be 230 Vac



Either
One



> 200Vdc

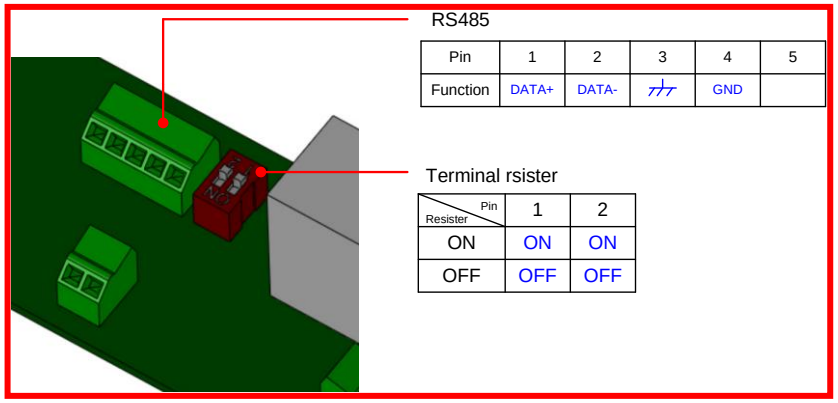
WARNING

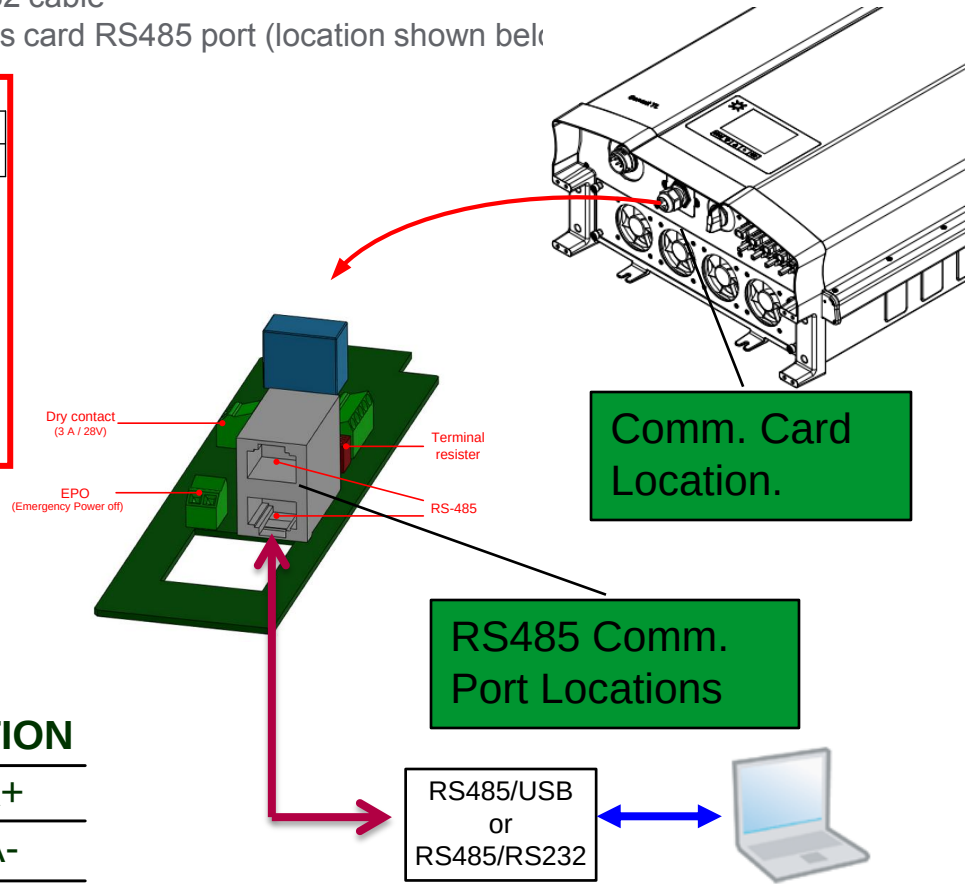
1. Keep switch off before connect to inverter
2. Beware of the connection that L1 to pin1, L2 to pin2, L3 to pin3, and PE to Ground.
3. **Incorrect wiring of PE (ex. PE and L1 were reversed) will cause electric shock or damage computer and/or inverter**
4. **Don't connect both DC and AC power, or inverter will start to operate**

Upgrade by PC or Notebook

Step 2: Communication connection – RS485

- Loosen 2 screws and remove cover plate to access comm. card. (location shown below)
- Connect computer to RS485/USB or RS485/RS232 cable
- Connect RS485 port from cable to communications card RS485 port (location shown bel





Data Format:

Baud rate: 9600
Data bits: 8
Stop bit: 1
Parity: N/A

Pin Layout:

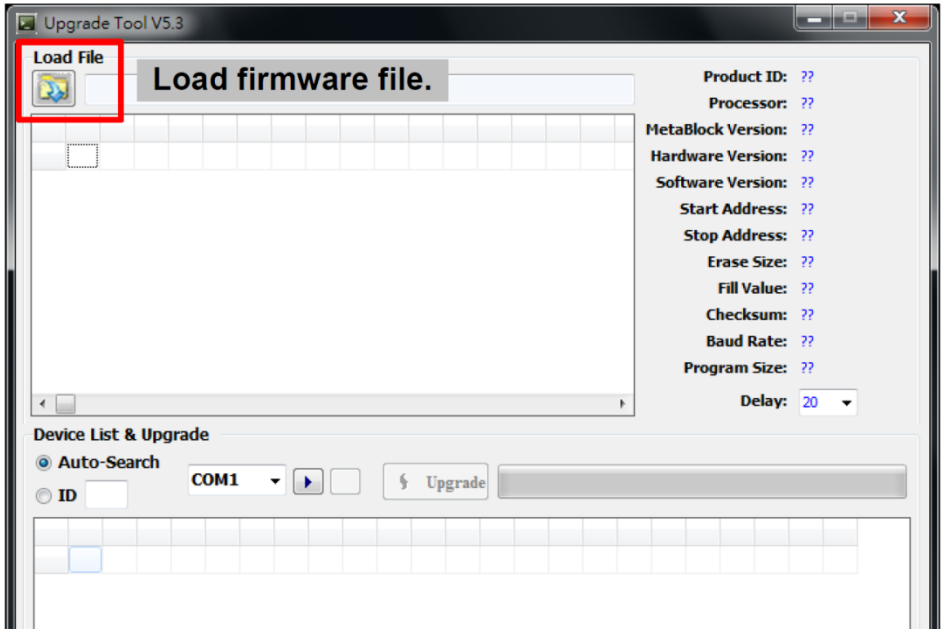
PIN	FUNCTION
4	DATA+
5	DATA-
8	GND

Step 3: Power on – switch on Power source

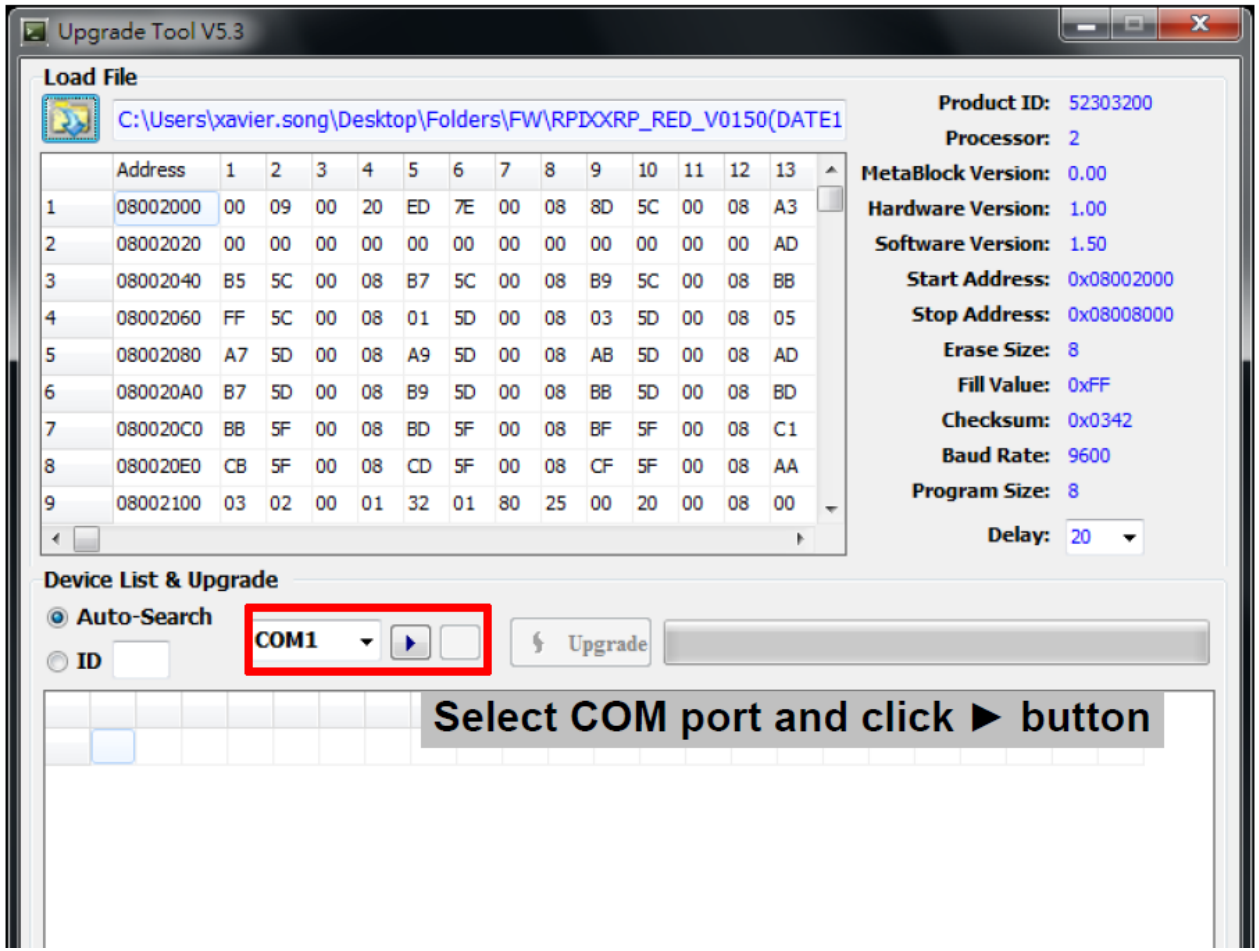
Step 4: Turn the main disconnect switch to ON position

Step 5: Start upgrade procedure

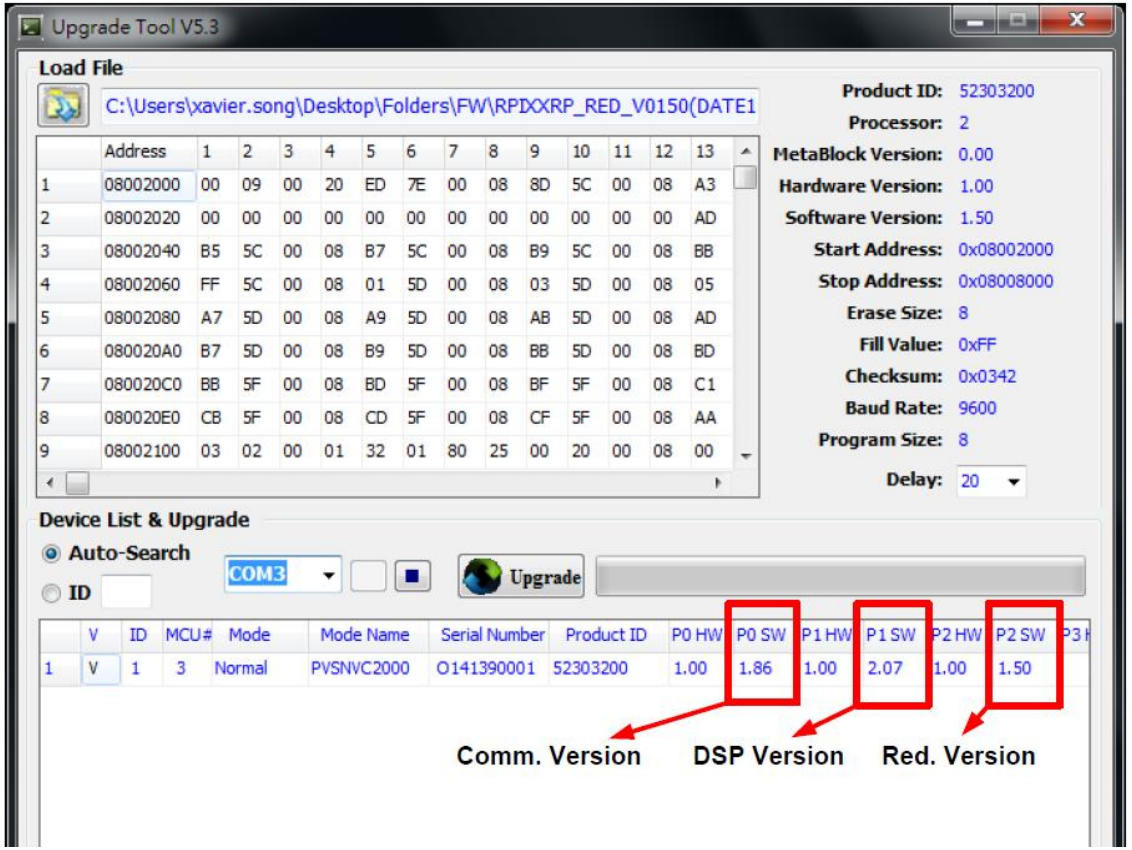
I. Download the firmware files from SolarExchange (Services/Conext TL/Firmware)
II. Execute the program “Upgrade V5.3.exe”
III. Click Load File and select the correct firmware file. It is suggested to start with COMM firmware first.



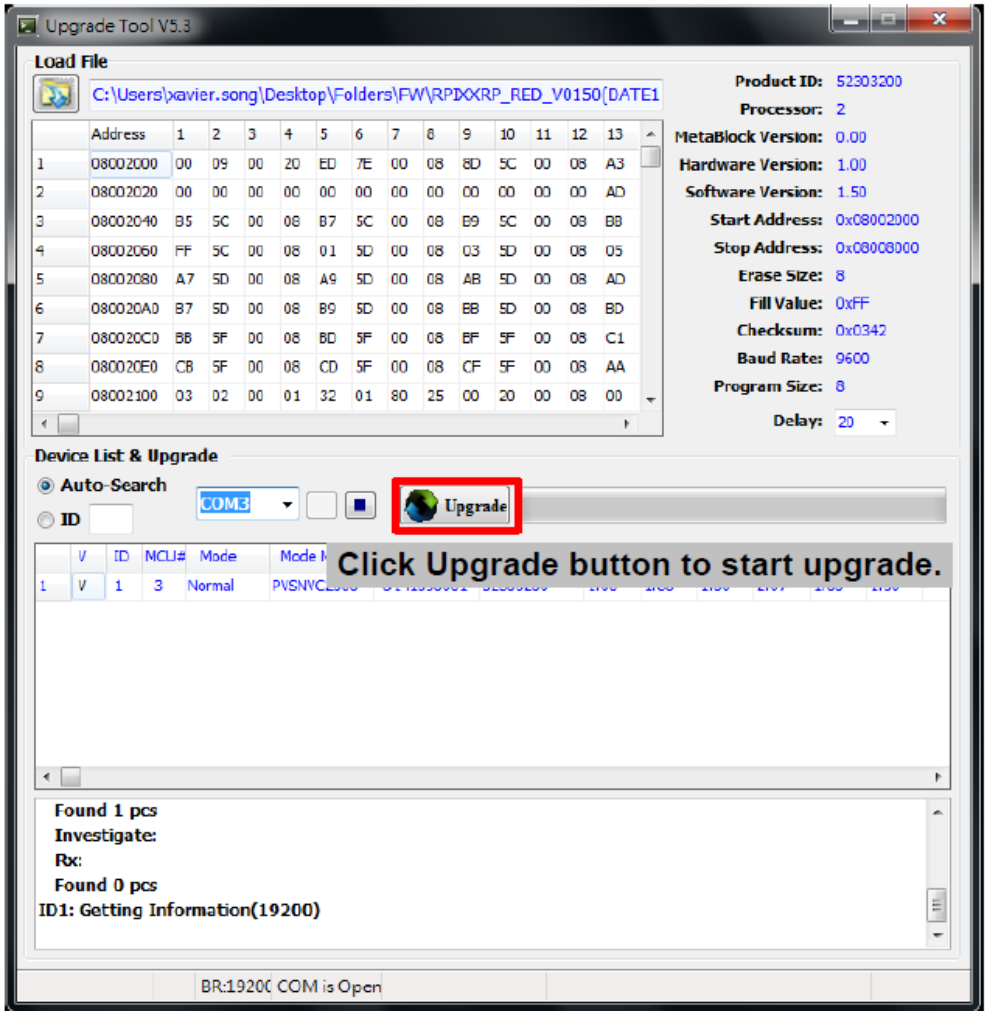
IV. Select the correct COM port and press the Arrow button.



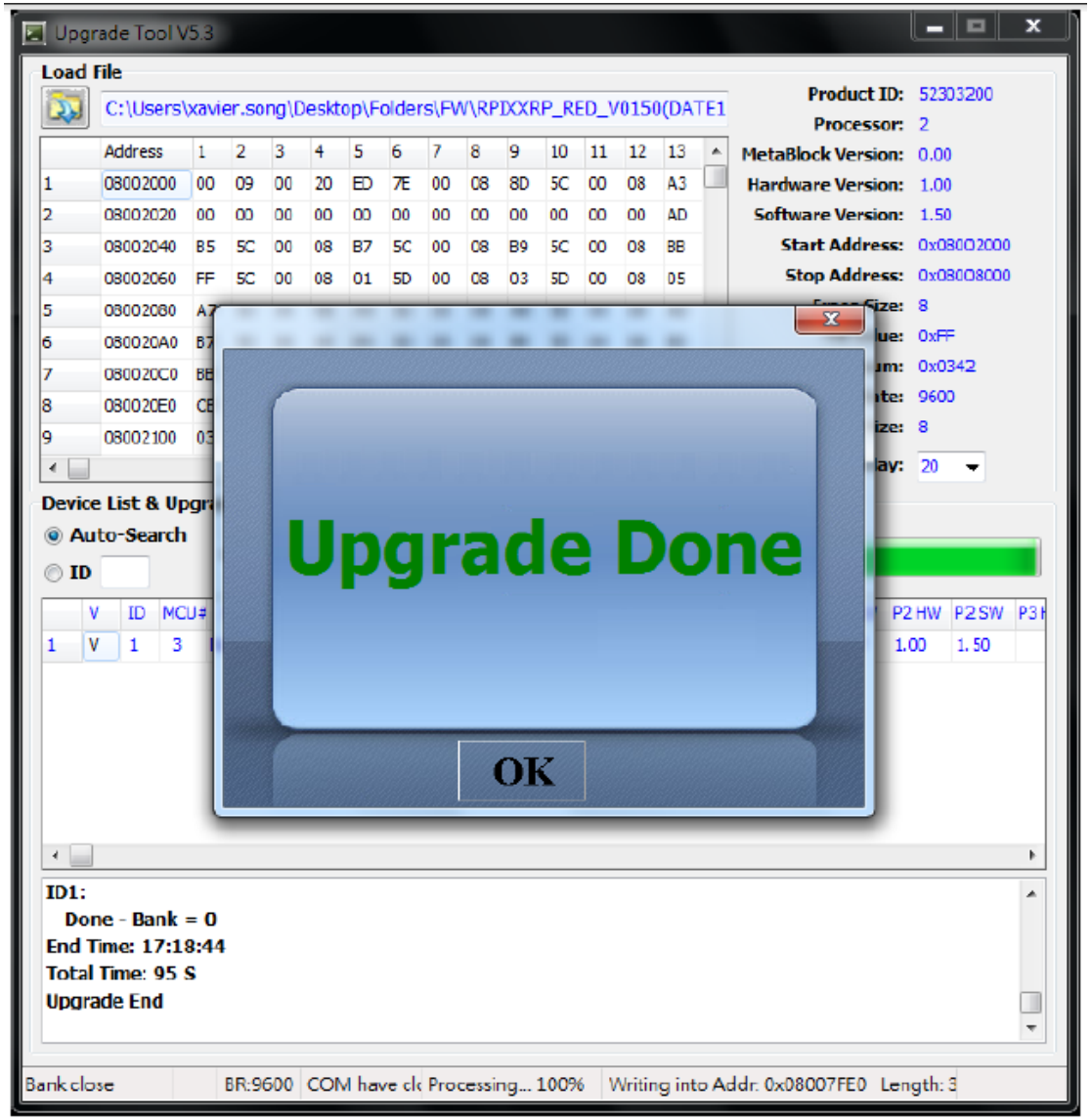
V. Check the current firmware version before uploading.



VI. Click Upgrade button to start upgrading.



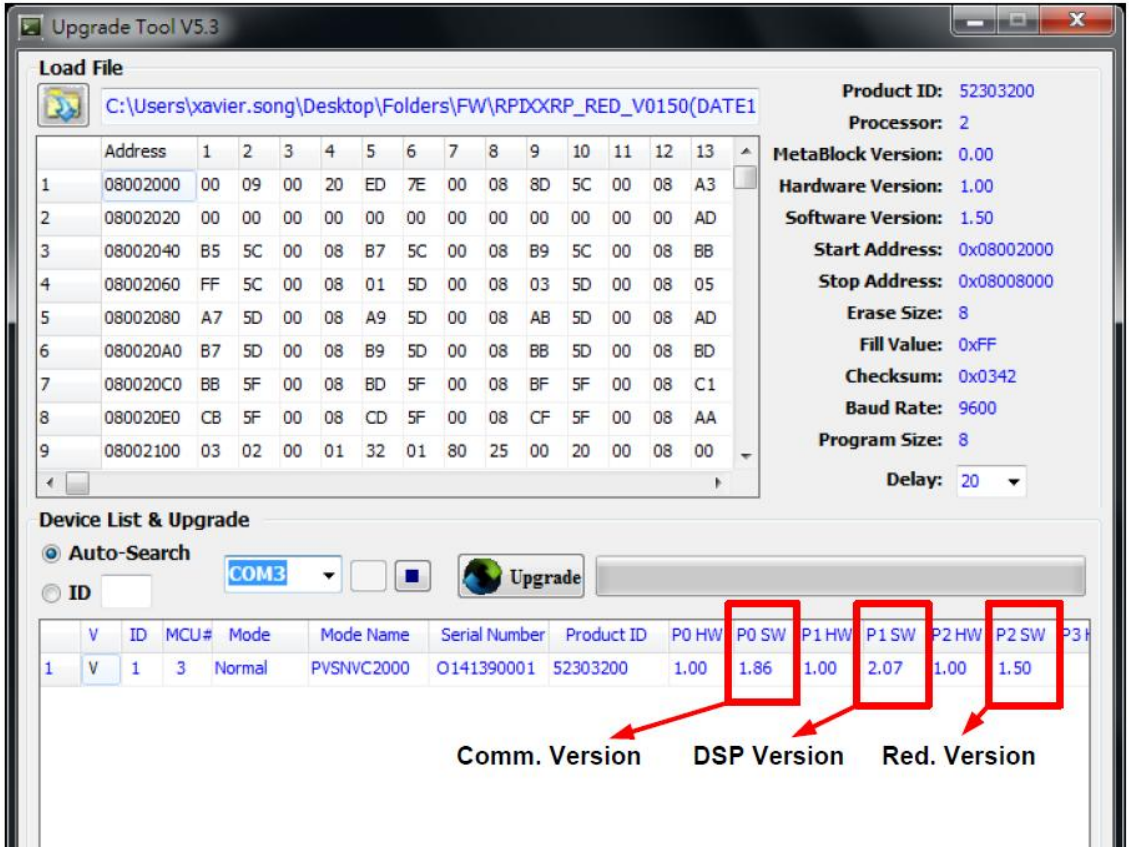
VII. When upgrade done appears, the upgrade for this processor is finished.



VIII. Please repeat steps III to VII for the DSP.
IX. Please repeat steps III to VII for the RED processor.

X. Verify the following version numbers

- Processor0 (Comm) - SW should be 1.96
- Processor1 (DSP) – SW should be 2.10
- Processor2 (RED) – SW should be 1.50



Step 6: Turn the main disconnect to “OFF” and remove the power source.
Step 7: Upgrade completed.

If your upgrade fails, you will see a green and red LED on the LCM flashing alternatively. It means the inverter is in Boot loader mode. Please adjust delay value to 50 and then upgrade and try again.