

How to Flash BL67/BL20 RFID Using a Universal Programming Dongle and Memtool 3



HOW TO

MATERIALS LIST

BL 20 Materials Hardware list:

- 1) RS 232 cable
- 2) RS 232 to Universal Dongle converter
- 3) Universal Programming Dongle
- 4) Card Connector
- 5) 5V power supply
- 6) BL 67 cards your flashing
- 7) Soldering iron
- 8) Solder
- 9) Scalpel
- 10) Clamp

BL20 Material Software List:

- 1) Windows XP operating system
- 2) Memtool 3
- 3) Most recent version of the 2RFID-A or 2RFID-S firmware file

BL 67 Materials Hardware list:

- 1) RS 232 cable
- 2) RS 232 to Universal Dongle converter
- 3) Universal Programming Dongle
- 4) Card Connector
- 5) 5V power supply
- 6) BL 67 cards your flashing

BL67 Material Software List:

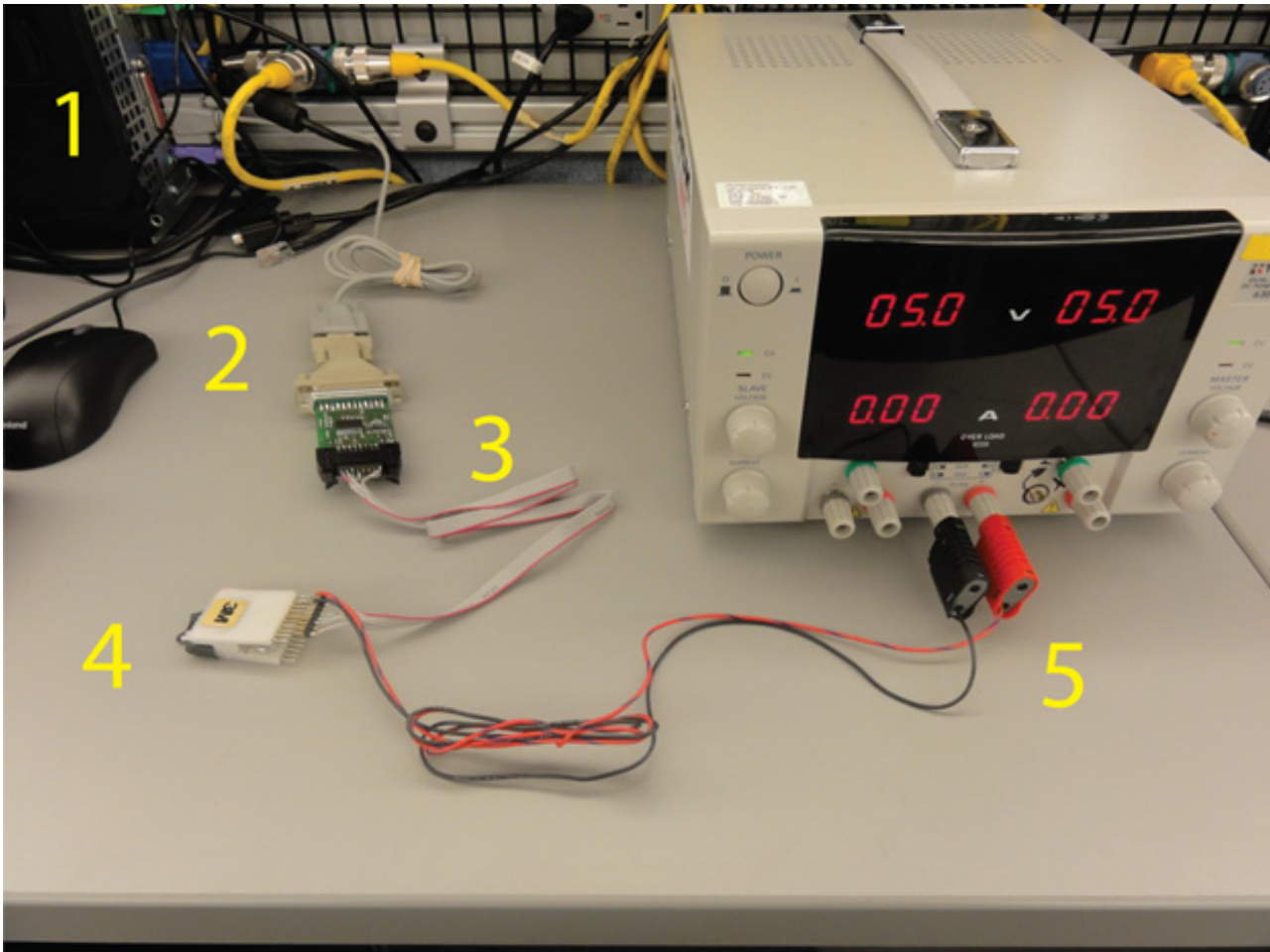
- 1) Windows XP operating system
- 2) Memtool 3
- 3) Most recent version of the 2RFID-A or 2RFID-S firmware file

IMPORTANT NOTES:

1. The Universal Programming Dongle can **ONLY handle 5 Volts**. (Please do not burn up your dongle by putting too much voltage through it.)
2. I've have only been able to flash using a Windows XP operating system. (It appears that my Windows 7 64 bit operating system is to new of a computer perform flashing.)

SETUP THE STATION:

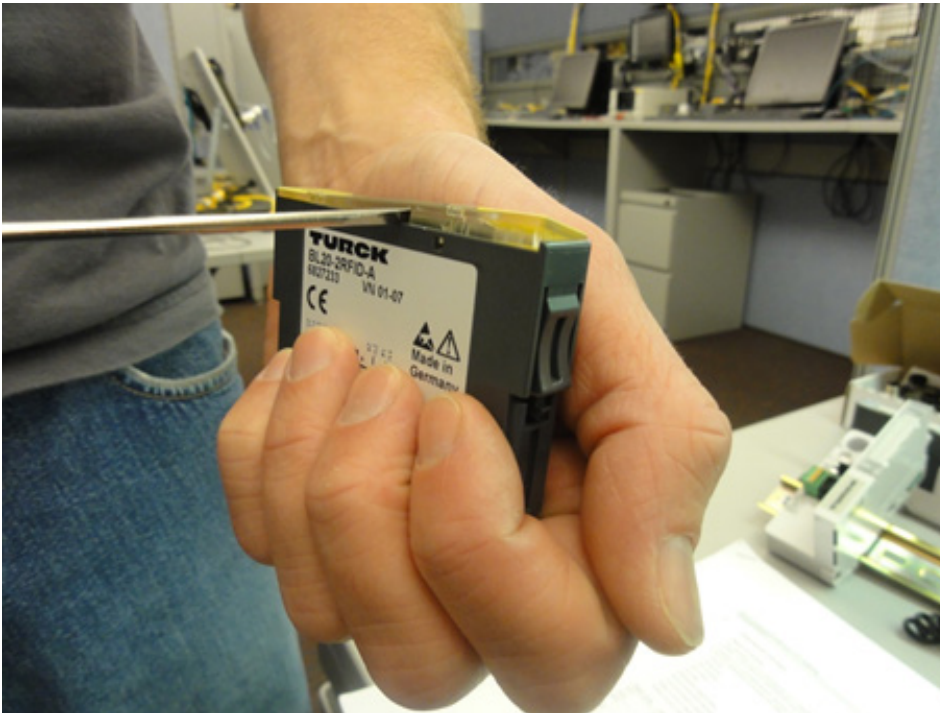
-> Hook the 1) RS232 cable to the back of your computer -> Hook the other end of the RS 232 cable to the 2) RS232 to Universal Dongle converter -> Hook the converter to the 3) Universal Dongle itself -> Leave the 4) Card Connector alone for the moment -> Hook the power leads up to the 5) Power Supply.



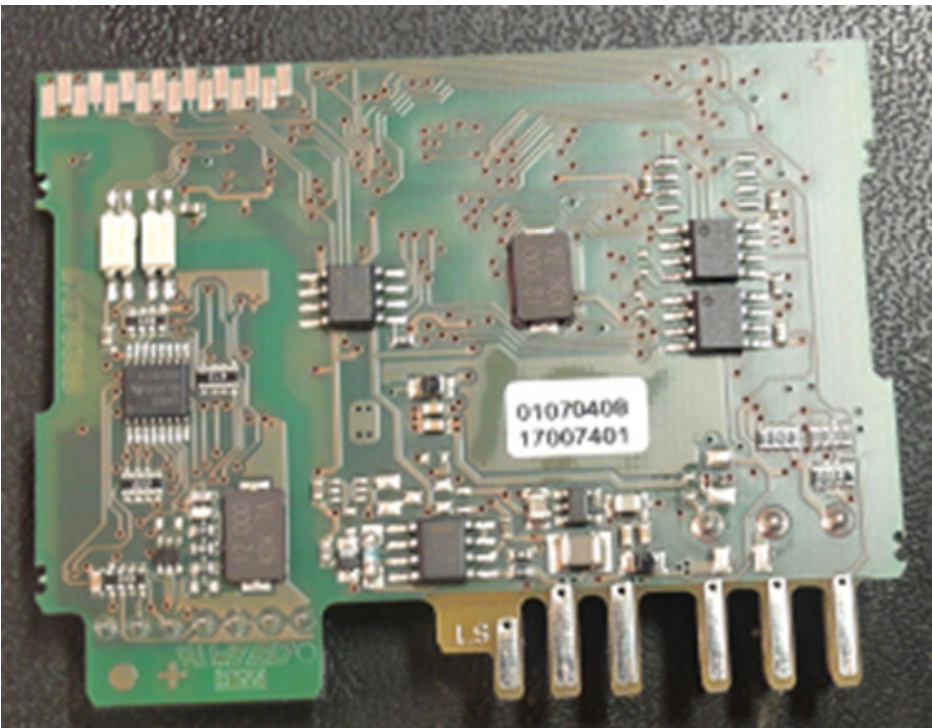
If you are flashing a BL67 card, please skip to page six. If you're flashing a BL20, please read on.

LET'S FLASH A BL20 CARD.

-> Remove the card from the casing



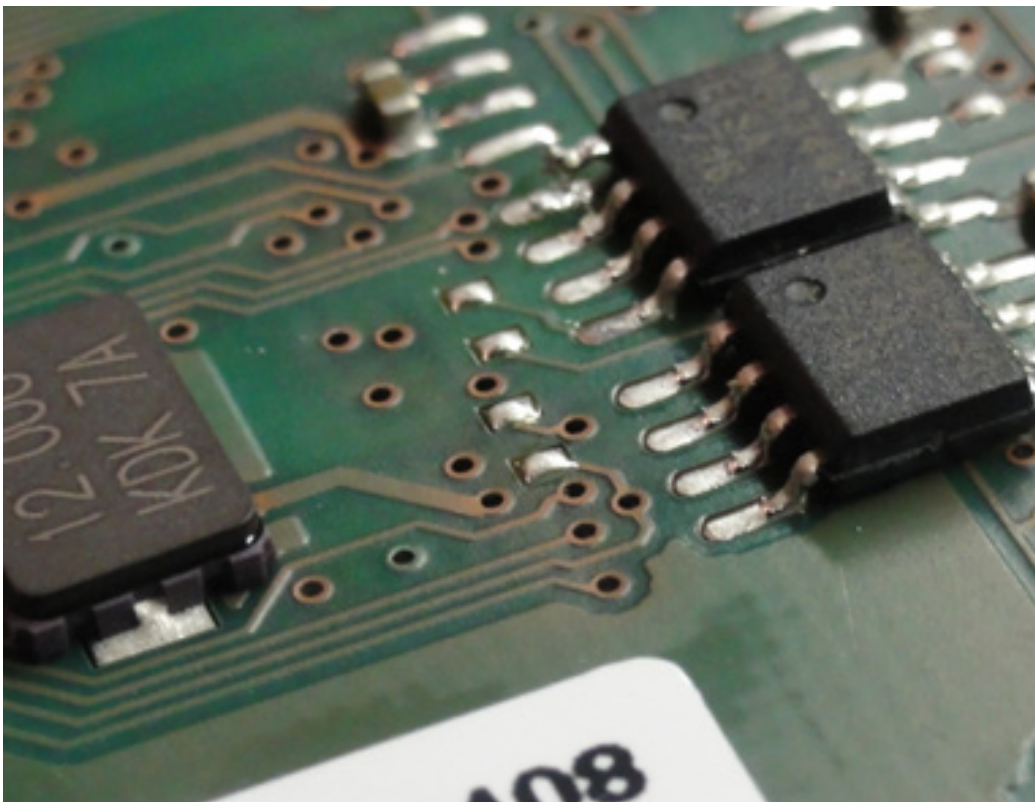
-> Bring the card to your solder station and find pin 1 of the top right micro chip (Look at the pictures)



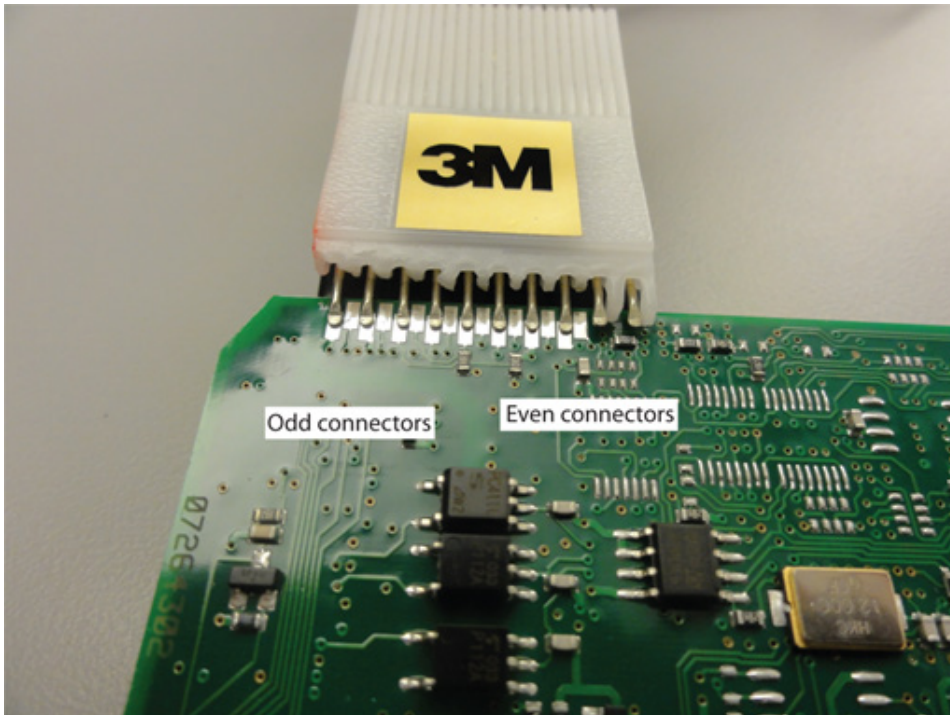
-> Gently remove pin 1 using your soldering iron and scalpel



-> This is what your chip should look like once pin 1 is removed

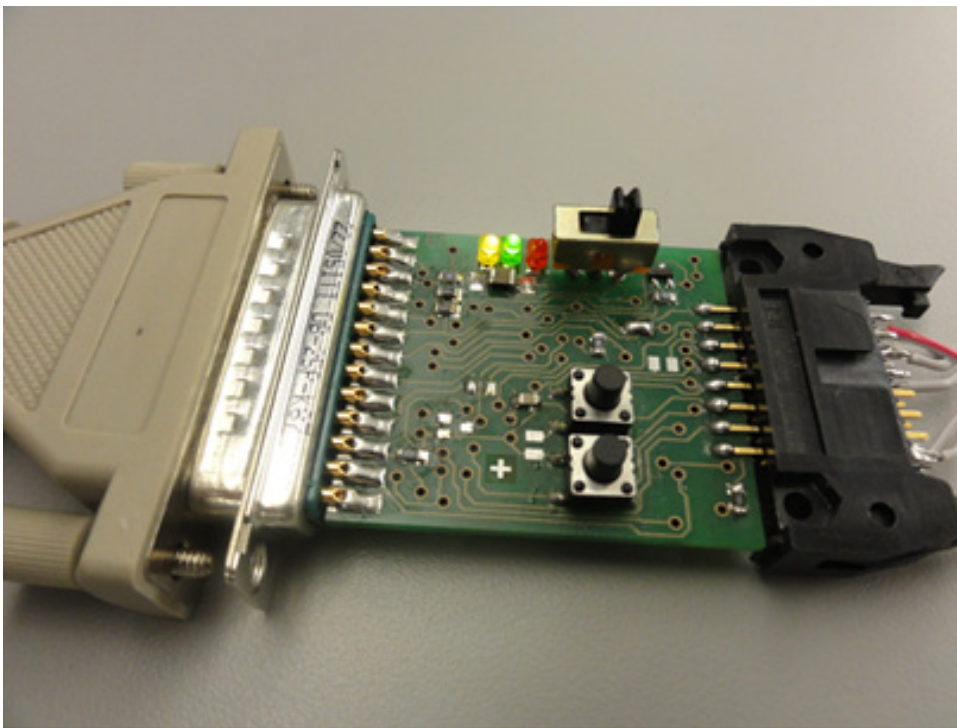


-> Bring the card back to your flashing station and hook it up to the Card Connector (Note: If the Card Connector is touching the even connectors on the card it will not flash.)

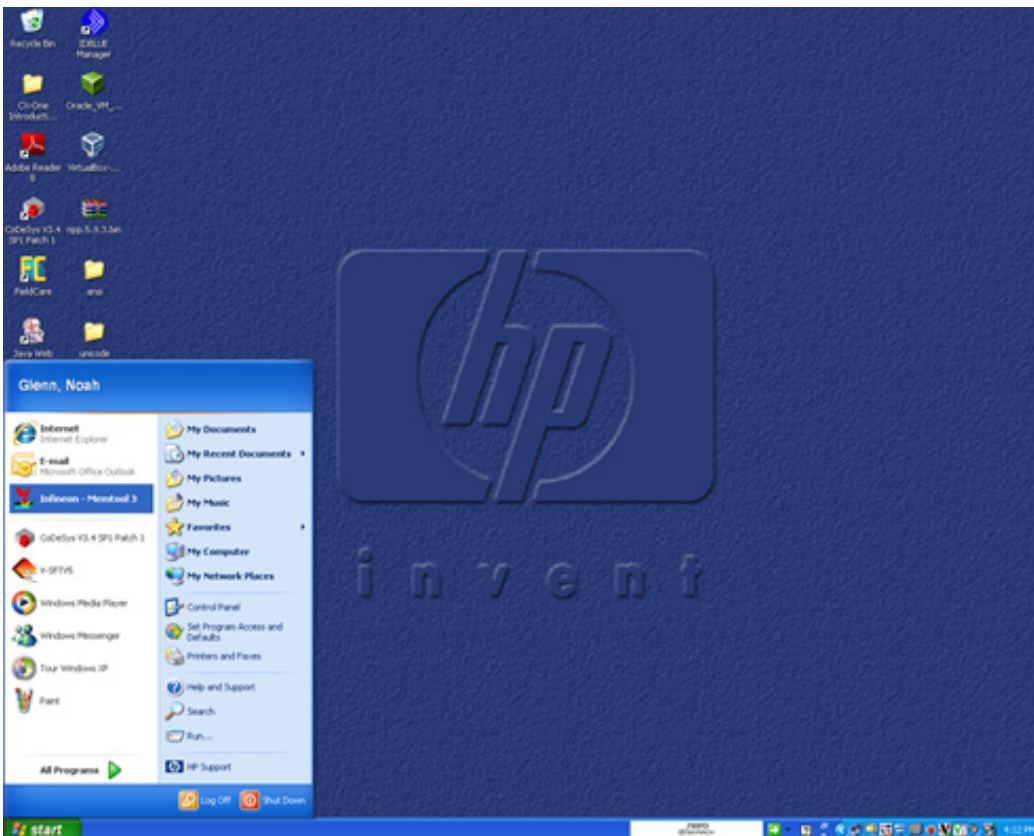


SET UP THE UNIVERSAL PROGRAMMING DONGLE

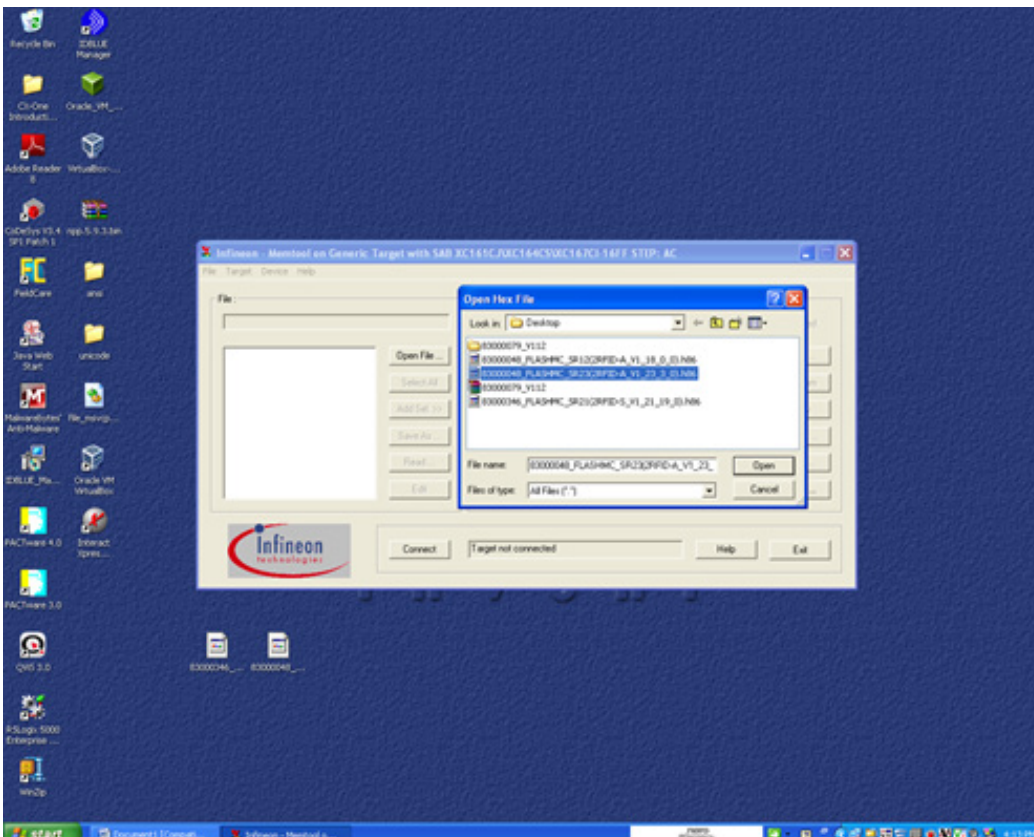
-> Make sure the switch is to the right -> Hit reset before you begin programming in Memtool 3 (You also must hit the reset switch before every card you program)



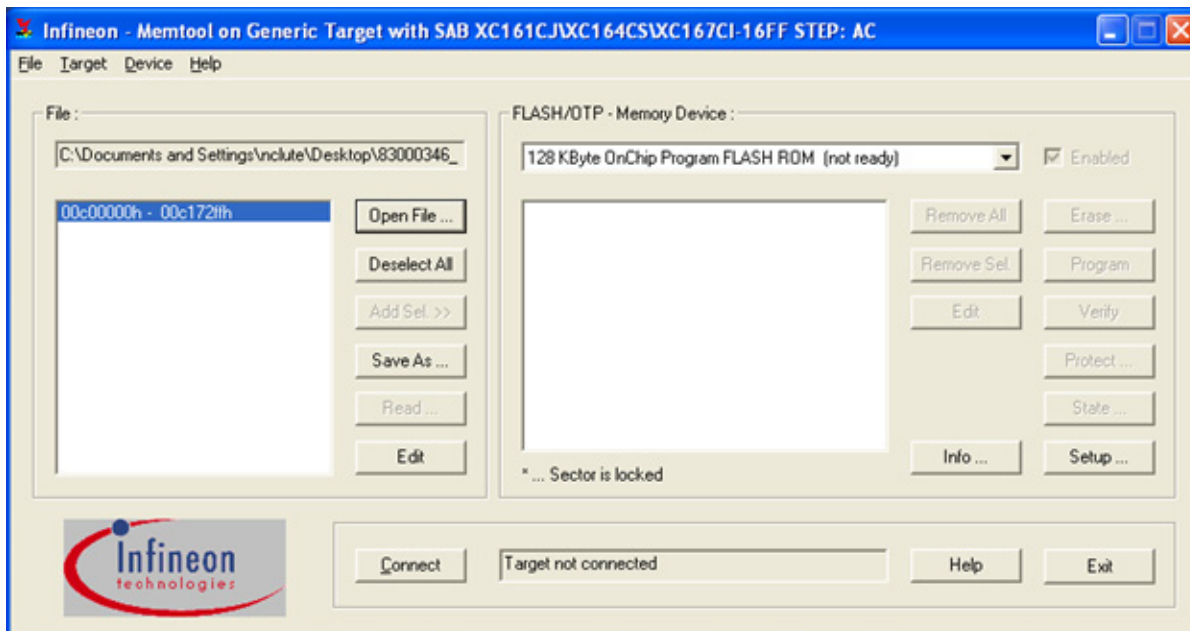
-> Open Memtool 3



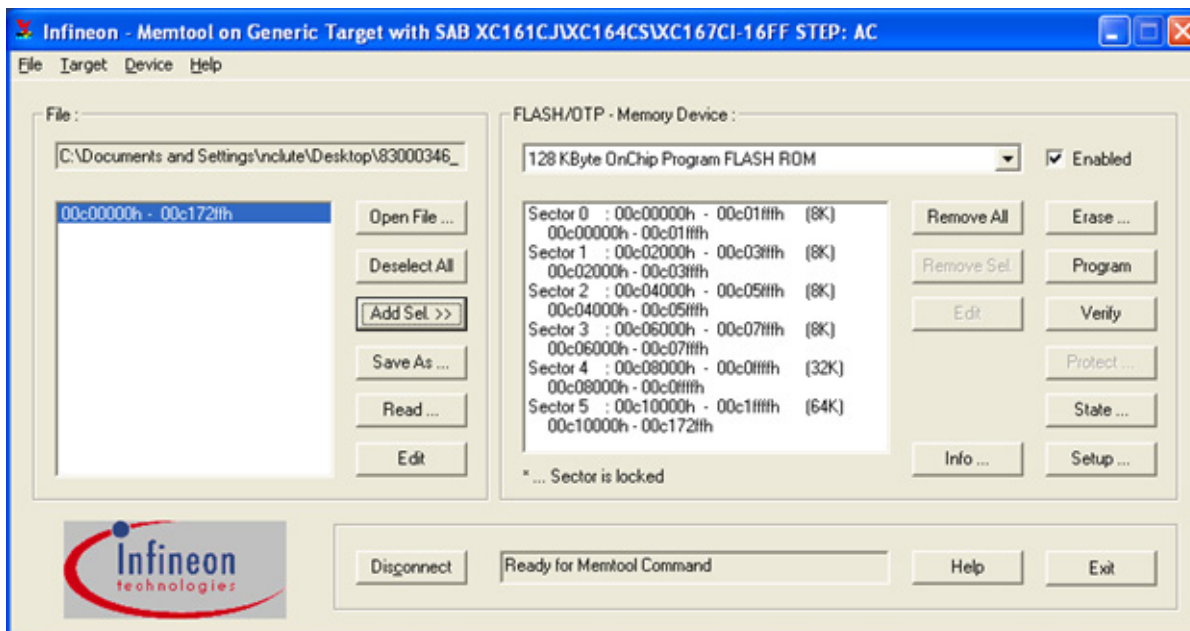
-> Open file -> Choose your firmware file -> Open



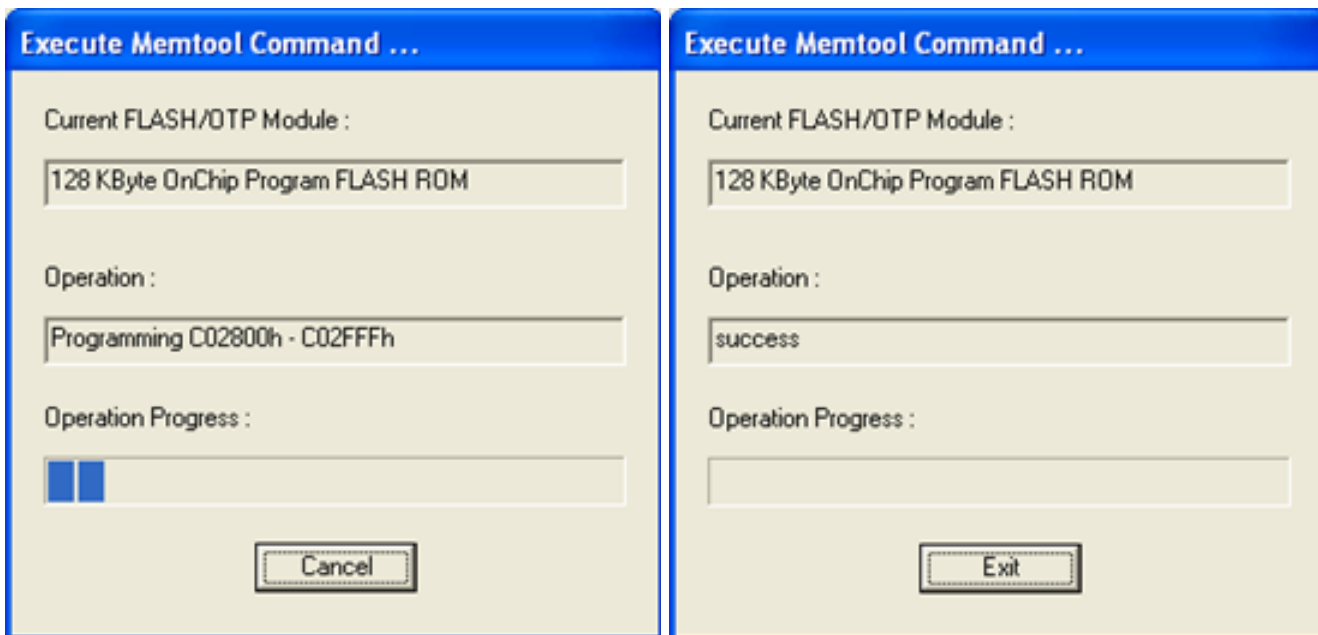
-> Highlight the firmware file -> Connect



-> Add Set -> Program



-> Let the program run



IMPORTANT NOTES:

1. When the programming has finished, **remember to solder pin 1 back down.** (BL20 users)
2. Every time you flash and new a new card you must hit the reset on the Universal Programming Dongle.

TROUBLE SHOOTING SOLUTIONS

-> If you get an error message in Memtool 3, here are some possible faults.

1. You forgot to hit the reset button on the Universal Programming Dongle. Hit the reset.
2. The Card Connector is touching the even connections on the card. Readjust it.
3. You did a poor job unsoldering pin 1. Check your work and try it again.
4. You allowed the soldering iron to touch the microchip, which in turned burned up the card's circuitry. Throw it away.
5. You didn't set up the Universal Programming Dongle correctly. Recheck it.
6. You ran more than 5V through the dongle and the dongle burned up. Try a different one.
7. Maybe the card is bad to start. Check it in PACTware of Xion Tool.
8. If one card just won't connect, try a different card.

IMPORTANT NOTE:

EVERY TIME YOU DO A TROUBLE SHOOTING SOLUTION YOU MUST COMPLETELY CLOSE OUT AND RESTART MEMTOOL.