

## CPU5 Configurator tool

This tool is used to download firmware to the CPU5A or CPU5B board.

It is available from the EdingCNC website at the download page.

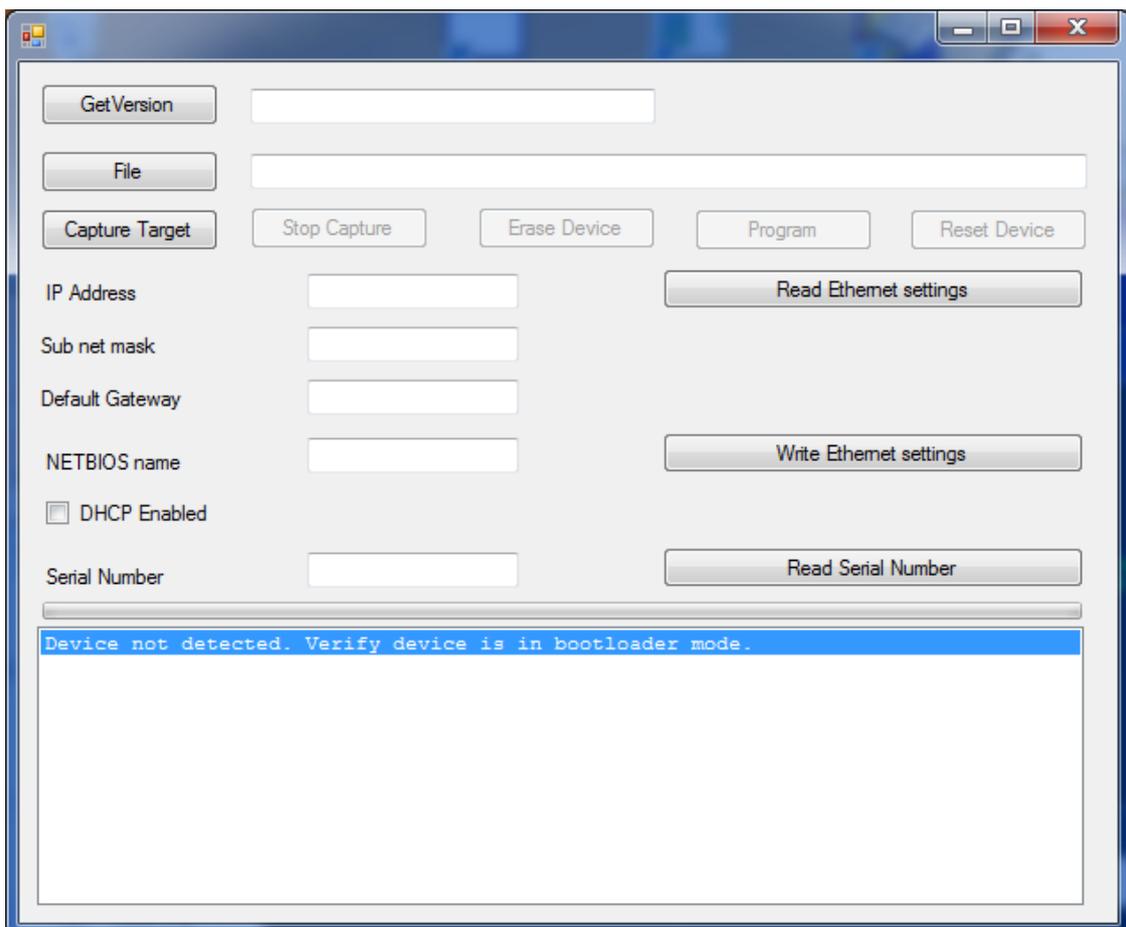
You need to install all 3 packages, package 2 and 3 may already be on your system, just try the CPU5 configurator tool and see if it works.

- Configurator Tool This tool requires that Microsoft .NET Framework 4
- Visual C++ Redistributable Package (x86)
- Get the CPU5 firmware from the EdingCNC download page. Be careful there are 4 different firmwares depending on the CPU A or B and depending on the communication USB or Ethernet.
- Firmware is always downloaded by the USB cable, also for Ethernet based CPU's

You can get these 4 packages from the EdingCNC download page.

## Downloading Firmware

**Step1:** Start the tool



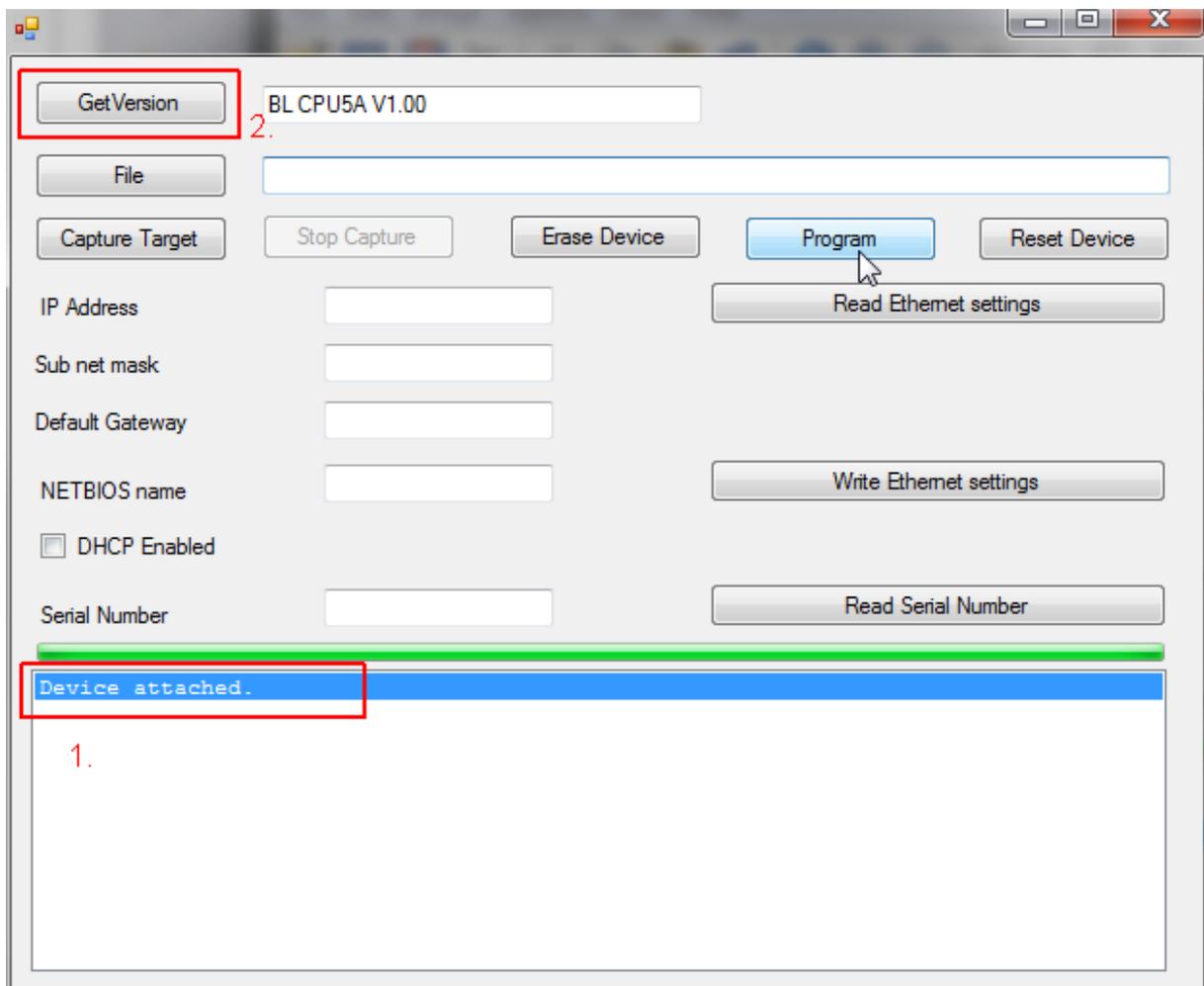
**Step 2 CPU5A:** Connect the USB cable, in case of external power, disconnect the power, then reconnect the power.

**Step 2 CPU5B:** With USB cable connected disconnect power, wait 2 seconds, then reconnect power.

Watch for "Device attached".

**Step 3:** Click within 5 seconds on "Get version" or "Capture target ". LED1 lights up, the CPU will remain in boot loader mode.

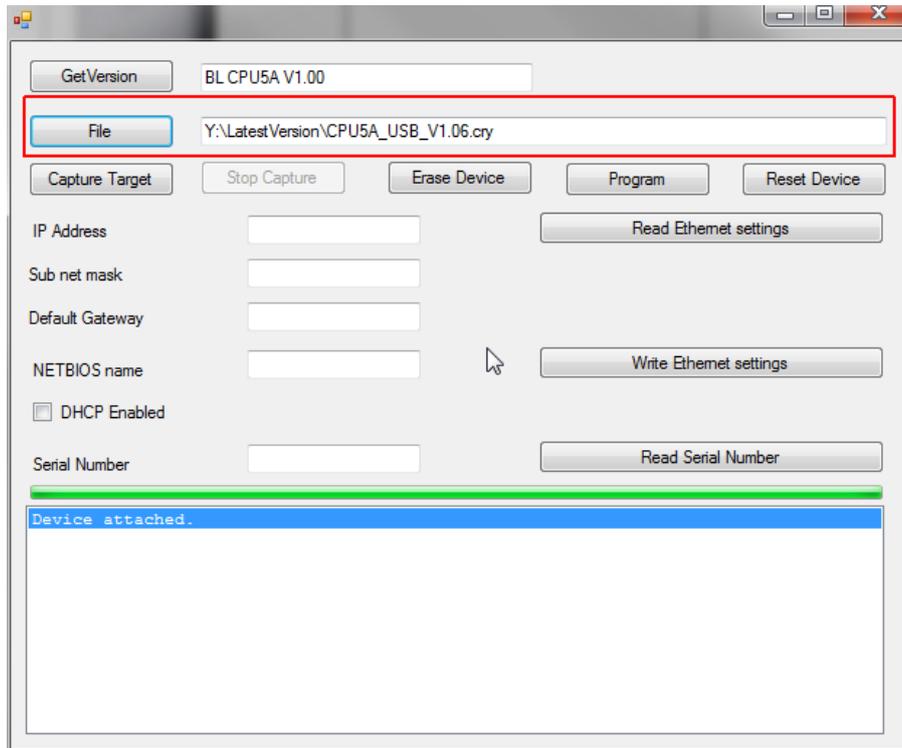
CPU Board: LED2 and LED3 will be blinking, LED1 is ON.



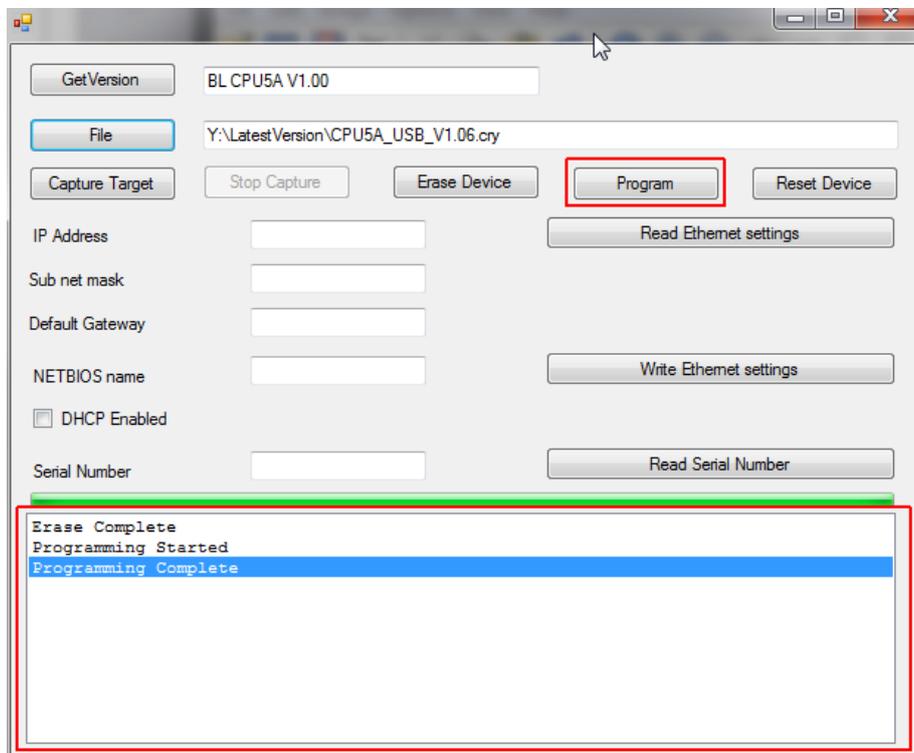
This holds the CPU in "boot loader" mode.

Bootloader mode allows downloading firmware which is next step.

**Step4:** Choose "File" and select the firmware file, in this case we will download the USB firmware for CPU5A.



**Step5:** Press "Program"



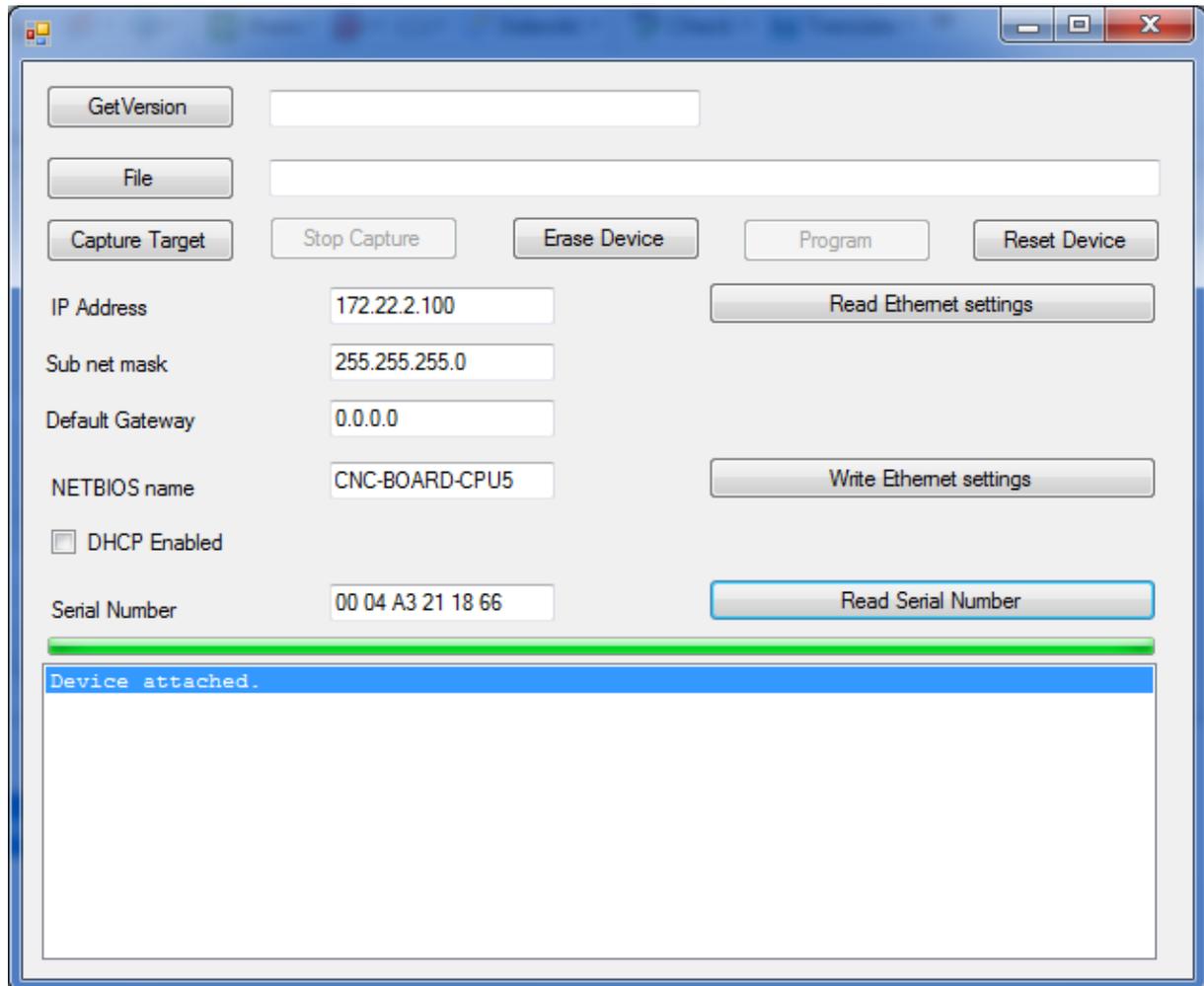
**Step6:** Ready, the device is now programmed, this takes a few seconds only. You are ready to go with the new firmware. Disconnect the POWER for CPU5B, the reconnect. Do the same for CPU5A if you use external power. If you use USB power or Disconnect /reconnect the USB cable.

**Next part is only for Ethernet boards and firmware, you can skip this if you have and USB CPU card.**

## Set up the Ethernet settings on the CPU board

Note: when you just obtained an Ethernet board the settings below are already applied, there is normally no need to change this.

When done, press “Read Ethernet settings”, it shows:



You see, the IPADDRESS is 172.22.2.100, Subnet mask is 255.255.255.0 please use the same settings as me. Be sure to leave the gateway at 0.0.0.0 and DHCP unchecked. NETBIOS name can be any name.

Save setting with button “Write Ethernet Settings”.

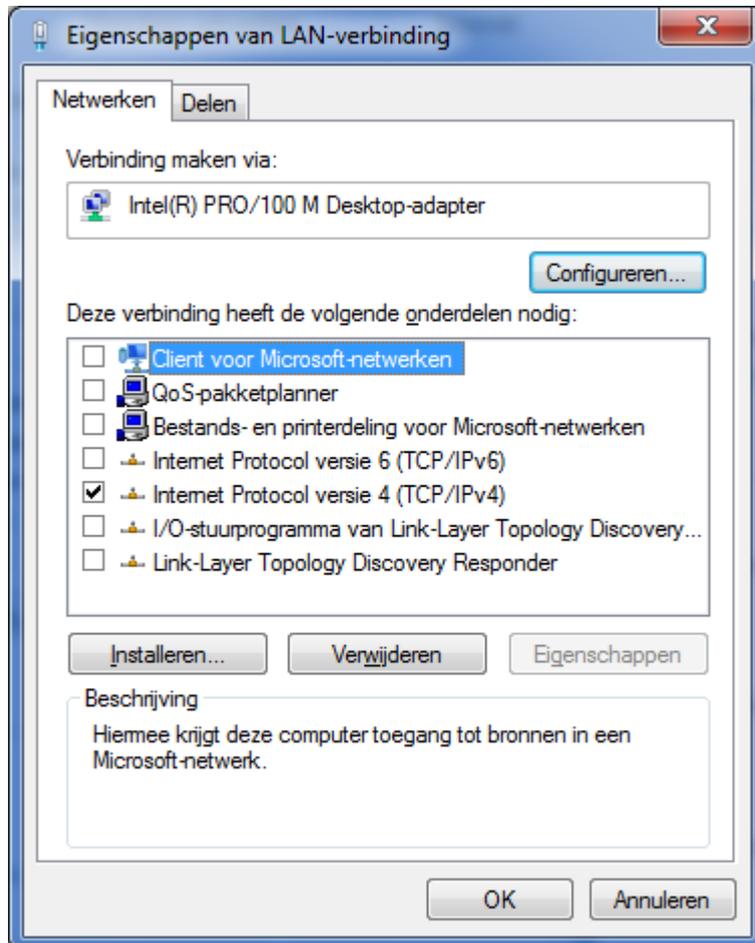
Now you are done, you can press reset to reset the processor, it will first enter boot load mode and after approx 5 seconds it will start the downloaded firmware. LED 3 will flash at a rate of approx 1 second.

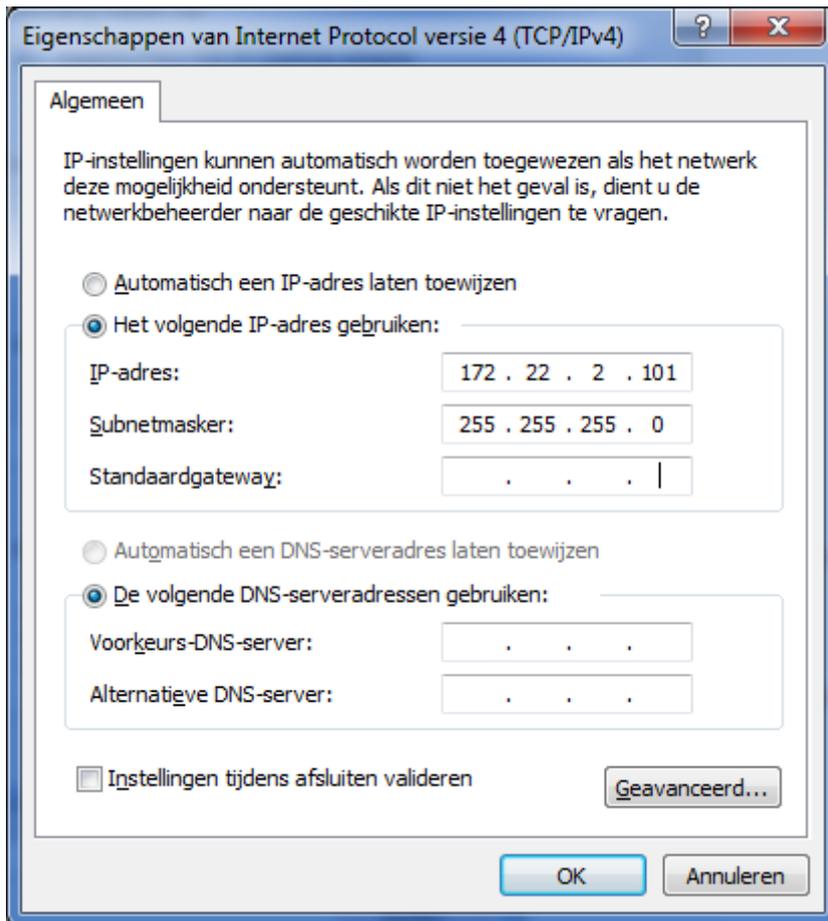
You can disconnect the USB cable, it is no longer needed.

## Setup network Card on Windows.

I use a Intel PRO/100M card in my desktop. This card is a second network card connected **ONLY** to the CPU using a **UTP CROSS** Cable.

Here are the settings, they must be applied **exactly as show** here:





Be sure to leave the standard gateway empty.

To check that the Ethernet settings are ok, open a command prompt and type ping 172.22.2.100:

```
Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [versie 6.1.7600]
Copyright (c) 2009 Microsoft Corporation. Alle rechten voorbehouden.

C:\Users\Bert>ping 172.22.2.100

Pingen naar 172.22.2.100 met 32 bytes aan gegevens:
Antwoord van 172.22.2.100: bytes=32 tijd<1 ms TTL=100

Ping-statistieken voor 172.22.2.100:
    Pakketten: verzonden = 4, ontvangen = 4, verloren = 0
    (<0% verlies>).

De gemiddelde tijd voor het uitvoeren van één bewerking in milliseconden:
    Minimum = 0ms, Maximum = 0ms, Gemiddelde = 0ms

C:\Users\Bert>
```

Start the USBCNC software and in the setup at "Connection to CPU" leave on "AUTO", the detected CPU will be connected.