

Bitstream Loader by Chris

Prerequisites:

To set the voltage and load the bitstream, you must purchase NextJtag V2.

Thanks for checking out this utility.

Feel free to use this as you wish. All I ask is that if you are able to produce Bitstreams, or have your own private Bitstreams, you consider sharing them with me, by way of appreciation for my work.

If you have any issues with this utility, then please get in touch via Discord (@Chris P#5854).

Happy Mining
Chris :)

The screenshot shows the Bitstream Loader/Launcher - v1.1 application window. It has a menu bar with 'Load Bitstream & Pool', 'Add Configuration', 'Add Pool', 'View Output', and 'About'. The main interface is divided into several sections: 'Choose a Configuration' and 'Choose a Pool Configuration (optional)' at the top; 'Bitstream (optional)' and 'Miner' text boxes; 'NextJtag (optional)' text box with a 'Set Voltage?' checkbox and a voltage slider set to 0.75; 'Miner Params (optional)' text box; 'Location of Params' with radio buttons for 'After Miner' (selected) and 'At the end'; 'Pool URL', 'Port', 'Rig Name Format (optional)', and 'Wallet' text boxes; 'No. FPGAs' and 'Miner Launch Delay' spinners both set to 1; 'Window Title' text box; 'Loop Settings' with radio buttons for 'Use All FPGAs' (selected) and 'Use 1 FPGA'; checkboxes for 'Seperate Instances (with Loop)' and 'Load Bitstream?'; and a 'Launch Miner' button. A footer note reads: 'Written by Chris, for the community. Please report any issues via Discord (@Chris P#5854)'.

Setting Voltages and Loading Bitstreams

This close-up shows the 'NextJtag (optional)' text box, the 'Set Voltage?' checkbox, and the voltage slider set to 0.75. To the right, it shows the 'Seperate Instances (with Loop)' and 'Load Bitstream?' checkboxes.

If you have NextJtag you can set the location of the .exe and (V2 only) set the volatge of your FPGA. Both these settings are ignored if "Load Bitstream" is not checked.

This close-up shows the 'No. FPGAs' and 'Miner Launch Delay' spinners both set to 1, the 'Window Title' text box, and the 'Loop Settings' with 'Use All FPGAs' selected.

No FPGAs: This value is used in a few ways...

- 1) Controls the number of instances to launch, when Use All FPGAs is set.
- 2) Used for the window title of each miner instance launched.
- 3) Used as a unique identifier for the Rig Name Format, in the pools section.
- 4) When Use 1 FPGA is set, It's used as the single instance window title and rig name format, if used.

Create a single Master launch file or a Master with separate launch files for each FPGA

- ☐ Seperate Instances (with Loop)
- ☐ Load Bitstream?

When checked, “Separate Instances (with loop)” allows you to create a launch-file for each FPGA, and one Master file to launch them all. The Master file uses the Miner Launch Delay value, and randomizes it, so that all the loops are not running at identical times.

Choose a Configuration

Nexus Variable

Choose a Pool Configuration (optional)

Nexus RU

If we use the above configuration: The Master file would be named “Nexus Variable - Nexus RU.cmd” and each separate miner file would be named “Nexus RU-1.cmd”, “Nexus RU-2.cmd” etc. The Master file would look like this:

```
Bitstream Loader/Launcher - v1.1
Load Bitstream & Pool Add Configuration Add Pool View Output About
Launch Master File
Master File Nexus RU-1.cmd Nexus RU-2.cmd Nexus RU-3.cmd Nexus RU-4.cmd Nexus RU-5.cmd Nexus RU-6.cmd Nexus RU-7.cmd
@echo off
setlocal enabledelayedexpansion

echo Loading Bitstreams
C:\FPGA\NextJtag-1.2.1-win64\bin\nextjtag.exe -m -a --set_voltage=0.74 -b C:\FPGA\1525_Nexus_Variable_A\1525_Nexus_Variable_A.bit

START "Nexus RU-1.cmd" CMD /C "C:\Users\micro\Documents\Embarcadero\Studio\Projects\LoadBitstream\Win32\Debug\Nexus RU-1.cmd"
TIMEOUT /T 22
START "Nexus RU-2.cmd" CMD /C "C:\Users\micro\Documents\Embarcadero\Studio\Projects\LoadBitstream\Win32\Debug\Nexus RU-2.cmd"
TIMEOUT /T 22
START "Nexus RU-3.cmd" CMD /C "C:\Users\micro\Documents\Embarcadero\Studio\Projects\LoadBitstream\Win32\Debug\Nexus RU-3.cmd"
TIMEOUT /T 22
START "Nexus RU-4.cmd" CMD /C "C:\Users\micro\Documents\Embarcadero\Studio\Projects\LoadBitstream\Win32\Debug\Nexus RU-4.cmd"
TIMEOUT /T 22
START "Nexus RU-5.cmd" CMD /C "C:\Users\micro\Documents\Embarcadero\Studio\Projects\LoadBitstream\Win32\Debug\Nexus RU-5.cmd"
TIMEOUT /T 22
START "Nexus RU-6.cmd" CMD /C "C:\Users\micro\Documents\Embarcadero\Studio\Projects\LoadBitstream\Win32\Debug\Nexus RU-6.cmd"
TIMEOUT /T 22
START "Nexus RU-7.cmd" CMD /C "C:\Users\micro\Documents\Embarcadero\Studio\Projects\LoadBitstream\Win32\Debug\Nexus RU-7.cmd"
TIMEOUT /T 22
```

And the separate files would look like this:

```
Bitstream Loader/Launcher - v1.1
Load Bitstream & Pool Add Configuration Add Pool View Output About
Launch Master File
Master File Nexus RU-1.cmd
@echo off
echo Leave this active. When the miner fails, it will be detected and relaunched from here.
set z=0

:Loop
START "BCU No.1" /WAIT CMD /C "C:\FPGA\1525_Nexus_Variable_A\fx-nexusminer-v2.exe eu.nexuspool.ru 8333 2QovouYepEFZ2HsMXkVEFm6eUU5r6z8tPQRZQYFJwXqYQKbMVR.RigNo-1 480"

set /a z+=1
echo Number of Restarts = %z%
goto loop
```

The above file launches the miner and waits until it shuts down, at which point it will re-launch it, unless you click the red cross to emergency close, which then will terminate the miner and upon returning to the launch file, you will be asked if you want to terminate the batch job. If the miner restarts, the number of restarts is recorded in the launch file. The launch file starts minimised to prevent cluttering up the screen.

```
Nexus RU-1.cmd
Leave this active. When the miner fails, it will be detected and relaunched from here.
Number of Restarts = 1
Number of Restarts = 2
Number of Restarts = 3
Number of Restarts = 4
```

Adding Configurations

The screenshot shows the 'Bitstream Loader/Launcher - v1.1' application window with the 'Add Configuration' tab selected. The window has a menu bar with 'Load Bitstream & Pool', 'Add Configuration', 'Add Pool', 'View Output', and 'About'. The main area contains several input fields and buttons:

- 'Edit Existing Configuration' dropdown menu.
- 'Configuration Title' text input field.
- 'Bitstream Location' text input field with a 'Load Bitstream' button to its left.
- 'Miner Location' text input field with a 'Load Miner' button to its left.
- 'Next/Tag Location' text input field with a 'Load Next/Tag' button to its left.
- 'Set Voltage?' checkbox, currently unchecked, with a value of '0.75' and left/right arrow buttons.
- 'Miner Params' text input field.
- 'Location of Params' section with two radio buttons: 'After Miner' (selected) and 'At the end'.
- 'No. FPGAs' spinner box set to '1'.
- 'Window Title' text input field.
- 'Miner Launch Delay' spinner box set to '1'.
- 'Save Stream Data' button.

At the bottom, a footer text reads: 'Written by Chris, for the community. Please report any issues via Discord (@Chris P#5854)'.

Adding configs is simple! Provide a Config Title and use the Load buttons to locate the various elements.

Location of Params allows you to control where params are added. Some go between the Miner and pool, while others after the pool. If you need both, try adding the params after the “Pool Port” like this `:8433 -u`

No. FPGAs is used in loops.

Window Title is for the CMD window title of the miner. A loop runs to create the files, using from 1 to No. FPGAs, which provides the unique Window Title for each miner instance.

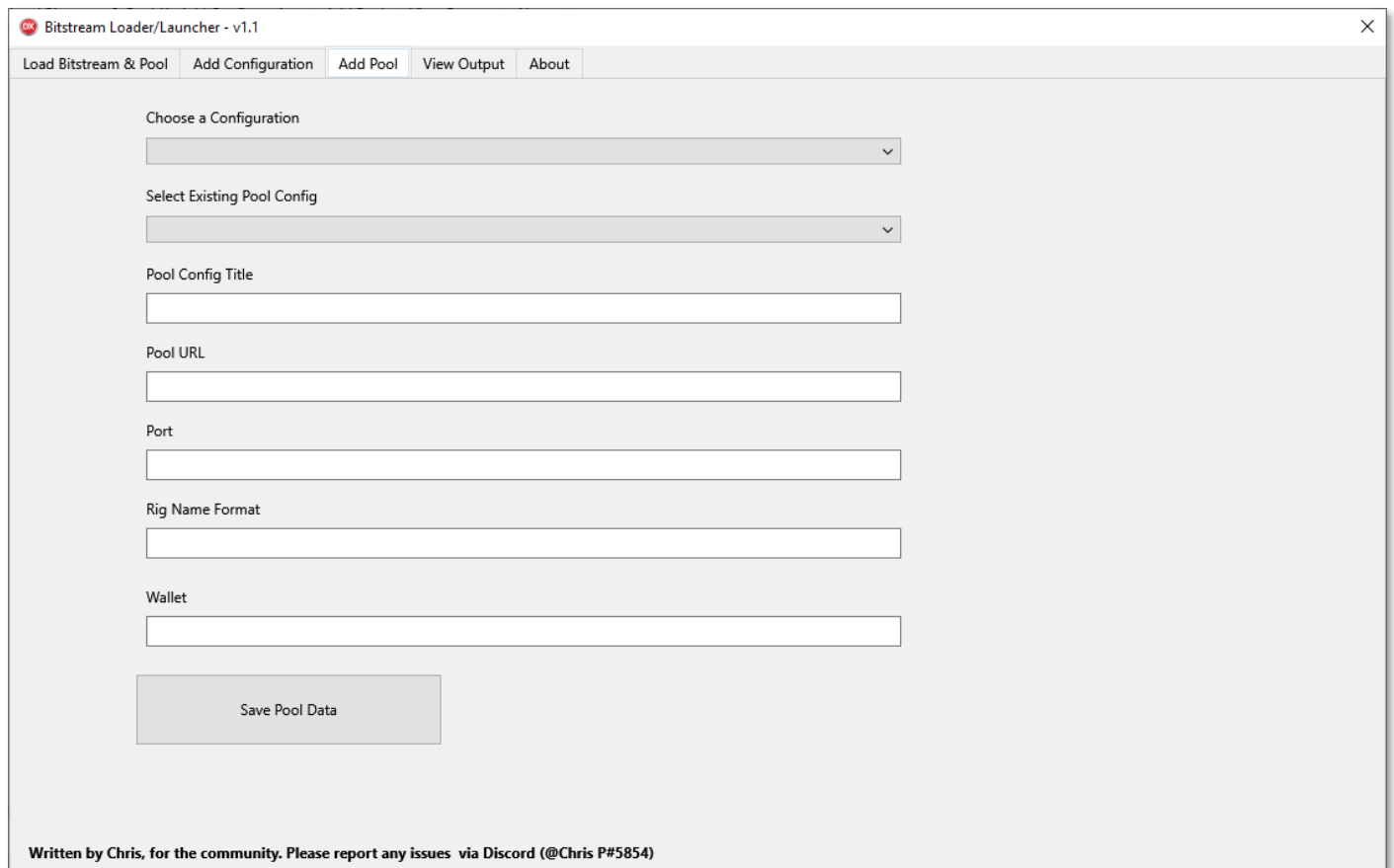
Miner Launch Delay sets the time between launching each instance of the miner.

Write all new settings for a new config.

Keep the same title to edit the current config.

Add text to the title, to clone the current config, into a new config.

Adding and Editing Pool Configurations



The screenshot shows a window titled "Bitstream Loader/Launcher - v1.1" with a menu bar containing "Load Bitstream & Pool", "Add Configuration", "Add Pool", "View Output", and "About". The "Add Pool" tab is active. The form contains the following fields:

- "Choose a Configuration" (dropdown menu)
- "Select Existing Pool Config" (dropdown menu)
- "Pool Config Title" (text input)
- "Pool URL" (text input)
- "Port" (text input)
- "Rig Name Format" (text input)
- "Wallet" (text input)
- "Save Pool Data" (button)

At the bottom, a footer reads: "Written by Chris, for the community. Please report any issues via Discord (@Chris P#5854)".

Chose to add a new Pool Configuration, or edit an existing one. Add text to the title of an existing config to clone it. You must have a Bitstream Configuration selected, to add/edit a Pool Config.

The *Port* is appended directly onto the pool URL, like this `mypool.comPool`.

So if the miner needs this format: `eu.mypool.com:1234` then add `:1234` in the Port box

And if the miner needs this format: `eu.mypool.com 1234` then add `1234` in the Port box (space before port)

Wallet well here's a suggestion: Let me know what coin you're mining, and I'll let you have my wallet address 🐶. If not, then just add your own 😞