**Gravitymaster’s SimpleMining OS FAQ**

Note: I do not work for SMOS this is all IMO

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Also Donation or Mine to, of you do please PM me in rocket chat so I can give you credit:   |  |  |  |  | | --- | --- | --- | --- | | **ETH** | 0x406a3523813651adb038fa2dcf28cf946fdde4d2 | **BTC** | 13eTBxexQBWVzjkKmHR3KLK74vFmVLWkZo | | **ETC** | 0x3e9cbabf8d9abccc5c80a2fc8eb72f329a457157 | **ZEC** | t1U9dp31osZvpSQNmvwtECjWSNLx4mFDiqJ | |  | **Miningpoolhub** gravitymaster.donate |  | **Suprnova.cc** gravitymaster.donate |   Donations from tricio454, tytanick, John2017 (Much thanks!!) |

**Error and Issues**

**how to increase SWAP (provided by mirelle)**

<https://www.digitalocean.com/community/tutorials/how-to-add-swap-space-on-ubuntu-16-04>

**RIG NOT SHOWN IN DASHBOARD**cat /mnt/user/config.txt  
check if you will see your email here if not use nano to edit

nano /mnt/user/config.txt

**my rig is not shown in dashboard or as OFF? (provided by mirelle)**

1. power failure / internet outage (check internet connection and if rig is working)
2. pendrive corruption - boot rig and see if it is booting properly, connecting to simplemining and starts mining
3. pendrive corruption/ rare case - sometime email can revert to its original “admin@simplemining.net” - check if you have your email in config or is the file corrupted
4. cloudflare ban\* (to check this you need to enter simplemining.net website and see if there is some kind of block message or captcha to solve)
5. dns problem\* - your ISP problem, you can solve this by using google dns (8.8.8.8 & 8.8.4.4), also you can reboot router to see if that helps.

**Overclock / FAN not working? (provided by mirelle)**

All overclock fields needs to be filled, if you will leave one field blank then OC wont work. You can set them to different values using a comma between each value:

* Core 100,90,90,90,100,100
* Memory 1000,1100,1000,800,900,900
* Power 80,100,80,100,80,100 → NVIDIA

**Error in dmesg on Nvidia rigs:**

**“ACPI Warning: \\_SB\_.PCI0.RP01.PXSX.\_DSM: Argument #4 type mismatch - Found [Buffer], ACPI requires [Package] (20150930/nsarguments-95)”**

* Add to /etc/default/grub
  + GRUB\_CMDLINE\_LINUX\_DEFAULT="acpi=off"

**Getting error**

**No protocol specified**

**Failed to connect to Mir: Failed to connect to server socket: No such file or directory**

**Unable to init server: Could not connect: Connection refused**

**ERROR: The control display is undefined; please run `nvidia-settings --help` for usage information.**

* Via SSH run
  + sudo nvidia-xconfig -a --cool-bits=31 --allow-empty-initial-configuration
* Edit /root/utils/oc\_nv.sh and change all instances of “nvidia-settings” to:
  + DISPLAY=:0 XAUTHORITY=/var/run/lightdm/root/:0 nvidia-settings
* Reboot

**How to fix power issues on AMD cards (updated with new image)**

* Edit /root/utils/oc\_dpm2.sh change line to look like this:
  + /root/utils/wolfamdctrl -i $x --core-state $coreState --mem-state $memoryState --core-clock ${coreArray[$i]} --mem-clock ${memoryArray[$j]} --volt-state $coreState --vddc-table-set 950

**Get an error with “an illegal memory access was encountered cryptonight\_extra\_cpu\_final line 235”**

* Each algo uses a GPUs differently over clock settings for one will not work for another. If you get this error drop over clock settings down and retest the cards for best results.

**Why is AMD cards slow on SMOS?**

* A fix has been found for the DAG and updated in experimentation release. [RX image with DAG file size fix](https://download.simplemining.net)
  + Can do this manually via SSH look below under “**Mining ROCM Kernel AMD Drivers for Dag fix”**
  + [**Linux Driver for Blockchain Compute 17.30.1029**](https://bitcointalk.org/index.php?topic=2102129.msg21391911#msg21391911)

**Why are cards not showing up in SMOS?**

* Make sure to update the latest BIOS!
* If Motherboard does not have these options will be limited in the amount of cards it can support
  + Enable 4G encode
  + PCIe support to Auto or GEN2
  + Also set:
    - Power on after lost of power
    - Disable everything that is not used, serial ports audio etc.
    - Disable virtualization
* Test one card/riser at a time to make 100% both are working then add the next cards/riser rebooting each time to confirm things are working.
* Power each card of only one PSU! Do not put power from one PSU to GPU and power from other PSU to riser. This causes strange problems.

**Why are Overclock / FAN not working when I set them?**

* Both Over Clock settings need to be set, do not level them blank use 0

**Why are the Overclock settings for Nvidia not 1 to 1?**

* The settings on the GUI for Core are half of what gets applied to the card, for example 100 will apply 200 to the card. Look at the Core/Mem column in the UI see the true OC settings.

**Why does SMOS keep rebooting?**

* Most likely Over clock is set to high. Start by setting core and memory to 0 and let the system run for a few hour. If all is well use the follow as a starting point and go up or down as need, these numbers come from my own rigs. The ranges are different cards, you want to set the values for each card so they are the same on the console dashboard for each.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Card** | **Coin** | **Algo** | **Core** | **Memory** | **Watts** | **PWR Pins** | **Hash / Sols** | **Miner** | **Intensity** |
| GTX 1050TI ($123-155) | ZEC | Equihash | 125-150 | 800 | 40W | 0 | 165-170 Sol/s | EWBF |  |
| GTX P106/1060 ($219-259) | ZEC | Equihash | 125-150 | 800-1100 | 70-75 | 1x 6 | 290-300 Sol/s | EWBF |  |
| GTX 1070 ($389-424) | ZEC | Equihash | 125-150 | 800 | 100-115 | 1x 6 or 8 | 420-440 Sol/s | EWBF |  |
| GTX 1070TI ($429-469) | ZEC | Equihash | 125-150 | 800 | 100-115 | 2x 8 | 500-520 Sol/s | EWBF |  |
| GTX 1080 ($480-500) | ZEC | Equihash | 110-200 | 100 | 225 | 1x 8 | 500-525 Sol/s | EWBF |  |
| GTX 1080TI ($769-800) | ZEC | Equihash | 110-200 | 100 | 225 | 2x 8 | 700-730 Sol/s | EWBF |  |
| GTX 1080TI | ZEC | Equihash | 110-200 | 100 | 210 | 2x 8 | 650-660 Sol/s | EWBF |  |
| GTX 1080TI | ZEC | Equihash | 110-200 | 100 | 165 | 2x 8 | 600-620 Sol/s | EWBF |  |
|  |  |  |  |  |  |  |  |  |  |
| GTX 1050TI | ETH | Ethash | -50 | 1050-1100 | 70-75 | 0 | 11-15 MH/s | Claymore-ETH |  |
| GTX P106/1060 | ETH | Ethash | -50 | 1050-1100 | 70-75 4Sol/W | 1x 6 | 23-24 MH/s | Claymore-ETH |  |
| GTX 1070 | ETH | Ethash | -50 | 1100-1200 | 85-100 | 1x 6 or 8 | 30-31 MH/s | Claymore-ETH |  |
| GTX 1070TI | ETH | Ethash | -50 | 1100-1200 | 90-100 | 2x 8 | 30-33 MH/s | Claymore-ETH |  |
| GTX 1080TI | ETH | Ethash | 200 | 1000 | 160-180 | 2x 8 | 34-35 MH/s | Claymore-ETH |  |
|  |  |  |  |  |  |  |  |  |  |
| GTX P106/1060 |  | NeoScrypt | 125-150 | 0 | 90-100 | 1x 6 | 710-740 kH/s | ccminer tpruvot | 15 |
| GTX P070 |  | NeoScrypt | 135-150 | 0 | 115 | 1x 6 or 8 | 900-1000 kH/s | ccminer tpruvot | 21-22 |
| GTX 1080TI |  | NeoScrypt | 110-200 | 0 | 225 | 2x 8 | 1.3-1.4 Mh/s | ccminer tpruvot | 22-23 |
|  |  |  |  |  |  |  |  |  |  |
| GTX P106/1060 |  | lyra2v2 | 100 | 0 | 100 | 1x 6 | 24-25 MH/s | ccminer tpruvot | 15 |
| GTX 1070 |  | lyra2v2 | 100 | 0 | 136 | 1x 6 or 8 | 41-42 MH/s | ccminer tpruvot | 21-22 |
| GTX 1080TI |  | lyra2v2 | 110-200 | 0 | 200 | 2x 8 | 57-63 MH/s | ccminer tpruvot | 22-23 |
|  |  |  |  |  |  |  |  |  |  |
| GTX P106/1060 |  | groestl | 125-150 | 800-1100 | 80 | 1x 6 | 30-34 MH/s | ccminer tpruvot | 15 |
| GTX 1070 |  | groestl | 125-150 | 800 | 100-115 | 1x 6 or 8 | 34-37 MH/s | ccminer tpruvot | 21-22 |
| GTX 1080TI |  | groestl | 110-200 | 100 | 165-200 | 2x 8 | 57-63 MH/s | ccminer tpruvot | 23 |
|  |  |  |  |  |  |  |  |  |  |
| GTX P106/1060 | XMR | Cryptonight |  |  |  | 1x 6 |  |  |  |
| GTX 1070 | XMR | Cryptonight |  |  |  | 1x 6 or 8 |  |  |  |
| GTX 1080TI | XMR | Cryptonight |  |  |  | 2x 8 |  |  |  |

Dual mine LBRY best for NVidia add about 10-25W per card

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Card** | **Coin** | **Algo** | **Core** | **Memory** | **Core UV** | **Watts** | **Hash / Sols** | **Miner** | **Intensity** |
| RX 470 ($209-250) | ETH | Ethash | 1150 | 1900 | 825 | 70-80 | 27.25 | Claymore-ETH |  |
| RX 570 ($209-259) |  |  |  |  |  |  |  |  |  |
| RX 580 ($219-269) | ETH | Ethash | 1130 | 2100 | 975 | 90 | 29.5 | Claymore-ETH |  |
|  |  |  |  |  |  |  |  |  |  |
| Vega 56 ($369-420) | ETH | Ethash |  |  |  | 105 | 38-40 | Claymore-ETH |  |
| Vega 56 | XMR | Cryptonight |  |  |  | 105 | 2000 Sol/s | Claymore-ETH |  |

Dual Mine DCR/SIA/PASCAL best for AMD 10-25W per car

**Why does SMOS Crash?**

* Don’t use low quality USB stocks. Some mining software uses more disk access than others (Claymore uses RAM where Etherminer uses disk) and will wear them out quick. The price of a good USB is the cost of a 120GB SSD, I would go with the SSD.
  + I use SSDs only the cost just a little more than USB, note in Etcher need to click settings then “Unsafe mode” to show SSD in the list of devices
* Don’t use anything less than a GOLD level PSU or put more than 80% MAX load unless you will not have a stable RIG. Make sure to check power using an inline watt meter.
  + **DO NOT** put more than two risers per Molex or SATA cables it will get to hot and cause problems or physical damage

**How to’s**

**Setting up the remote access id \*very\* easy. (provided by mirelle)**

* Press Ctrl+Alt+F3 (it will open new terminal window)
* login with username/password "miner" (you will not see the password because of security reasons, just type it and press Enter)
* run this: `curl https://www.teleconsole.com/get.sh | sh`
* and this: `teleconsole`
* It will give you Connection ID. You can use it for yourself or send to anyone.
* More info here https://www.teleconsole.com/

**Enable system logs on a miner**  **(provided by mirelle)**

Login via putty to the rig

user: miner

password. miner

get root access:

sudo su -

Enable at bootup system log and start system log

systemctl enable rsyslog && systemctl start rsyslog

You can check system log status with:

systemctl status rsyslog

should get some output if running like:

Loaded: loaded (/lib/systemd/system/rsyslog.service; enabled; vendor preset: enabled)

Active: active (running) since Tue 2018-01-30 11:11:01 CET; 2h 37min ago

All system logs are stored in:

/var/log

Real time log watch:

tail -f -n 100 NAME\_LOG\_FILE

escape CTRL+C

Watch log file:

less NAME\_LOG\_FILE

u can go up and down by ARROW UP DOWN or PAGE UP DOWN

escape with q

Last boot message u can check with:

dmsg

and scroll up

if u wanna search a string in boot log

dmsg | grep SEARCH\_STRING

**See Public IP within SSH Terminal (provided by mirelle)**

press in SSH Terminal CTRL+ALT+F3 and type following code: `curl ipinfo.io/ip

**Install AMDMEMINFO  
wget http://54.67.59.249/amdmeminfo.tar.gz && tar xvfz amdmeminfo.tar.gz && sudo mv amdmeminfo /usr/local/bin  
`sudo amdmeminfo  
How to auto sell mined coins for BTC or other coins.**

* <https://bittrex.com/Lab/AutoSell>
  + Standard trade fees apply
* <https://miningpoolhub.com/>
  + Click on “Auto Exchange” select the coin you want to exchange to and which coins you want to exchange from
  + .2% fee for service

**How to write image under Linux**

* unzip -p /home/clintar/Download/simpleminer-R-v1118.img.zip |dd of=/dev/sdh bs=1M

**Show GPU to PCIe slot info**

* cat /var/log/Xorg.0.log | grep "NVIDIA" | grep GPU

**How to open more console locally?**

* Ctrl + Alt + F3 or Ctrl +Alt + F2

**How to login via SSH?**

* Download PuTTY from [http://putty.org](http://putty.org/) Install, run
* Go to [simplemining.net](http://simplemining.net/) to find out your IP address
* Open putty, enter IP like this and click [Open](http://i.imgur.com/3f1Zi5N.png)
* [Press Accept](http://i.imgur.com/CZAtZvr.png)
* [Default username and password: miner](http://i.imgur.com/UmnXlf6.png)
* Can gain root by typing “sudo -i”

**How do I gain root access via SSH?**

* After login type sudo -i

**How do I see the running miner via SSH?**

* Login via ssh ( user: miner / password: miner) (do not sudo -i)
* screen -x miner

**How to change email address via SSH?**

* nano /mnt/user/config.txt

**How do I flash to a SSD using etcher.io?**

* Click on gear in top right and then click unsafe mode

**How do I overclock each GPU at different values as well as power?**

* You can set them to different values using a comma between each each setting for example:
  + Memory 1000,1100,1000,800,900,900
  + Core 100,90,90,90,100,100
  + Power 80,100,80,100,80,100

**How do I add a new miner to SMOS?**

* Request anything like this in the #SUPPORT channel do not spam th #GENERAL Channel
* SMOS is running linux, you can compile and install new miners any time you want.
  + Also can integrate into the SMOS GUI by replacing old miners under /root/miners\_org/

**How to change voltage on AMD cards, this is not a persistent command**

* for (( i = 0; i < $num; i++ )); do
* sudo /root/utils/wolfamdctrl -i $i --volt-state 0 --vddc-table-set 975
* done

**How do I see the Motherboard details**

* sudo dmidecode -t 2

**How to see details about cards?**

* lspci -nnk | grep -i VGA -A2
* lspci -nnkq | grep -i VGA -A2 #slow does PCI lookup of unknown devices via external DB
* lspci | grep 3D
* nvidia-smi -L
* AMD Memory Details and Manufacture
  + wget https://www.dropbox.com/s/e9bnlia1lyymxkk/amdmeminfo.tar.gz  
    tar -zxvf amdmeminfo.tar.gz  
    sudo cp amdmeminfo /usr/local/bin/  
    sudo amdmeminfo

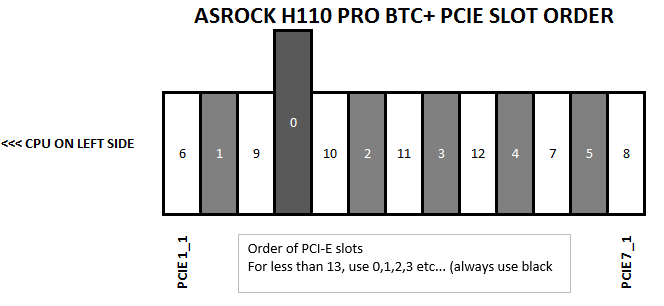
**How can I update the bios on the cards without using Windows on the same system?**

* Get a list of the cards
  + sudo /root/utils/atiflash -ai
* Save existing bios from card
  + sudo /root/utils/atiflash -s <card number> <rom file name>
* Use [winscp](https://winscp.net/eng/download.php) to download the files to local Windows Computer
* Edit bios with [SRBPolaris V3 - BIOS editor](https://bitcointalk.org/index.php?topic=1882656.0)
* Use [winscp](https://winscp.net/eng/download.php) to upload to bios to rigs
* Write Bios back to cards
  + sudo /root/utils/atiflash -p <card number> <rom file name>
* Option if all cards are the same write all of them at once:
  + sudo /root/utils/atiflash -pa <rom file name>

**Miscellaneous Information and Details**

**PCI-E Slot Order:**

* **ASROCK Pro btc+ (13 Slots)**
  + Starting from left to right from the CPU end... 6,1,9,0 (full slot), 10,2,11,3,12,4,7,5,8



**What is the default login and password via SSH?**

* Login: miner
* Password: miner

**Can both AMD and Nvidia Cards be put in the same rig?**

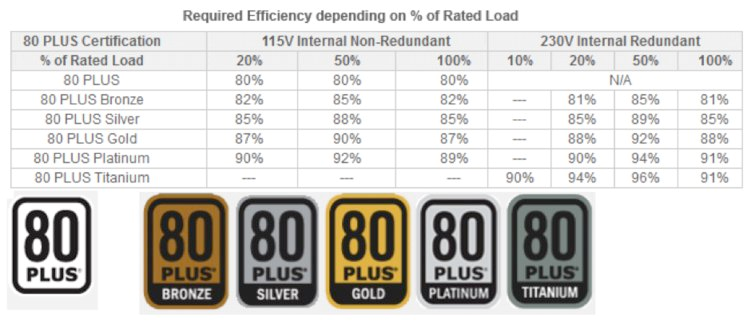
* Simple answer no, each image is optimized for each card type
* But, you could ssh into the OS and install the drivers / CUDA / OpenCL at the core it’s just Linux OS

**How many cards does SMOS Support?**

* SMOS supports up to 15 cards but most motherboards have a hard I/O limit of 13 when using PCI expanders.

**Power**

* PSU are at peak efficiency between 55% and 60%, will also create a lot more heat when above 75%. Buy large PSU and use 60-65% of rated power.



**Links to miniers and documents**

* [Claymore's Dual Ethereum AMD+NVIDIA GPU Miner v10.1 (Windows/Linux)](https://bitcointalk.org/index.php?topic=1433925.0)
* [Claymore's CryptoNote AMD GPU Miner v10.2 (Windows/Linux)](https://bitcointalk.org/index.php?topic=638915.0)
* [Claymore's ZCash AMD GPU Miner v12.6 (Windows/Linux)](https://bitcointalk.org/index.php?topic=1670733.0)
* [Etherminer Docs](https://gist.githubusercontent.com/jmiehau/0470ef3262d83987221e/raw/a532999178fe49948a5a0237cb24588a8947aa8d/gistfile1.txt)
* [ccminer-skunk-krnlx](https://github.com/krnlx/ccminer-skunk-krnlx/blob/master/README.txt)
* [SGminer](https://github.com/genesismining/sgminer-gm)
* [EWBF CUDA](https://bitcointalk.org/index.php?topic=1707546.0)
* [xmr-stak-amd](https://github.com/fireice-uk/xmr-stak-amd)
* [xmr-stak-nvidia](https://github.com/fireice-uk/xmr-stak-nvidia)

**CMD Utilities**

* [nvidia-smi](http://manpages.ubuntu.com/manpages/precise/man1/alt-nvidia-current-settings.1.html)
* [rocm-smi](https://github.com/RadeonOpenCompute/ROC-smi)
* [Windows CMD OC for Nvidia](https://github.com/deathcamp/NVOC)
* [Windows CMD OC for AMD](https://forums.guru3d.com/threads/overdriventool-tool-for-amd-gpus.416116/)

**SMOS on Bitcointalk.org**

* <https://bitcointalk.org/index.php?topic=1541084.0>

**How to I know the best coin to mine?**

* <https://whattomine.com/>
* [https://www.coinwarz.com/](https://www.coinwarz.com/cryptocurrency)

**AMD Card Utilities**

* [SRBPolaris V3 - BIOS editor for RX4XX and RX5XX cards](https://bitcointalk.org/index.php?topic=1882656.0)
* [PolarisBiosEditor v1.6.1](https://github.com/jaschaknack/PolarisBiosEditor)

**Example Miner Configuration strings:**

**EWBF Miner BTG**

--server eu.pool.gold --user GPXtSb35UVFUe8fYMEkfVqXoAw11fT5VRX.$rigName --pass x --port 3044

--server btg.suprnova.cc --user gravitymaster.$rigName --pass x --port 8816

**EWBF Miner ZEC**--server asia.equihash-hub.miningpoolhub.com --user gravitymaster.$rigName --pass x --port 20570 --pec --api 0.0.0.0:42000 --log 1 --logfile zcash.log

--server asia1-zcash.flypool.org --user t1U9dp31osZvpSQNmvwtECjWSNLx4mFDiqJ.$rigName --pass x --port 3333 --pec --api 0.0.0.0:42000 --log 1 --logfile zcash.log

**EWBF Miner KMD**  
--server kmd.suprnova.cc --user gravitymaster.$rigName --pass x --pass x --port 6250 --pec --api 0.0.0.0:42000 --log 1 --logfile zcash.log

**EWBF Miner HUSH**

--server hush.suprnova.cc --user gravitymaster.$rigName --pass x --port 4048 --pec --api 0.0.0.0:42000 --log 1 --logfile zcash.log

**EWBF Miner BitcoinZ**

--server mining.miningspeed.com --user t1QtKZrMTaRRWfkCkqQutQH9K5LTgMNoSfv.$rigName --pass x --port 3072 --pec --api 0.0.0.0:42000 --log 1 --logfile zcash.log

**Claymore ZEC 12.6 BTG AMD**

-zpool eu.pool.gold:3044 -zwal GPXtSb35UVFUe8fYMEkfVqXoAw11fT5VRX.$rigName -zpsw x -allpools 1

-zpool btg.suprnova.cc:8816 -zwal gravitymaster.$rigName -zpsw x -allpools 1

**Claymore ZEC Komodo (KMD)**  
-zpool stratum+tcp://kmd.suprnova.cc:6250 -zwal gravitymaster.$rigName -zpsw x

**CCMINER XMR**  
-a cryptonight -o stratum+tcp://asia.monero.miningpoolhub.com:20580 -u gravitymaster.$rigName -p x -i 23

**CCMINER Electroneum (ETN)**

-a cryptonight -o stratum+tcp://etn.suprnova.cc:8875 -u gravitymaster.$rigName -p x

**CCMINER Groestl**  
-a groestl -o stratum+tcp://asia1.groestlcoin.miningpoolhub.com:20486 -u gravitymaster.$rigName -p x -i 23

**CCMINER Vertcoin** (https://github.com/Nanashi-Meiyo-Meijin/ccminer)

-a lyra2v2 -o stratum+tcp://hub.miningpoolhub.com:20507 -u gravitymaster.$rigName -p x -i 23

**CCMINER Mona** (https://github.com/Nanashi-Meiyo-Meijin/ccminer)

-a lyra2v2 -o stratum+tcp://mona.suprnova.cc:2995 -u gravitymaster.$rigname -p x -i 23

-a lyra2v2 -o stratum+tcp://hub.miningpoolhub.com:20593 -u gravitymaster.$rigname -p x -i 23

**Claymore 10 Pirl**

-wd 1 -r 1 -tstop 90 -allpools 1 -allcoins 1 -epool stratum+tcp://pirl.minerpool.net:8004 -ewal 0xb75bb0052c65063649a4cd8632c754a4d7c88bfc -epsw x -gser 2 -eworker $rigName -mport 0.0.0.0:3333

-wd 1 -r 1 -tstop 90 -allpools 1 -allcoins 1 -epool stratum+tcp://pirl.pool.sexy:6006 -ewal 0xb75bb0052c65063649a4cd8632c754a4d7c88bfc -epsw x -gser 2 -eworker $rigName -mport 0.0.0.0:3333

**Claymore 10 Dual mine ETH/DCR**  
-wd 1 -r 1 -gser 2 -esm 2 -minspeed 15 -tstop 90 -allpools 1 -allcoins 1 -epool asia.ethash-hub.miningpoolhub.com:17020 -ewal gravitymaster.$rigName -eworker gravitymaster.$rigName -epsw x -mport 0.0.0.0:3333 -dpool dcr.suprnova.cc:3252 -dwal gravitymaster.$rigName -dpsw x -dcoin dcr -dcri 15

**Claymore 10 Dual mine PIRL/DCR**

-wd 1 -r 1 -gser 2 -minspeed 15 -tstop 90 -allpools 1 -allcoins 1 -epool stratum+tcp://pirl.minerpool.net:8004 -ewal 0xb75bb0052c65063649a4cd8632c754a4d7c88bfc -epsw x -eworker $rigName -mport 0.0.0.0:3333 -dpool dcr.suprnova.cc:3252 -dwal gravitymaster.$rigName -dpsw x -dcoin dcr -dcri 15

**Claymore 10 Dual mine ETH/SIA**  
-wd 1 -r 1 -minspeed 15 -tstop 90 -allpools 1 -allcoins 1 -esm 0 -epool stratum+tcp://eth-cn.dwarfpool.com:8008 -ewal 0x$walletETH/$rigName -epsw x -mport -3333 -dpool stratum+tcp://hub.miningpoolhub.com:20550 -dwal gravitymaster.$rigName -dpsw x -dcoin sc

-wd 1 -r 1 -minspeed 15 -tstop 90 -allpools 1 -allcoins 1 -esm 2 -epool asia.ethash-hub.miningpoolhub.com:17020 -ewal gravitymaster.$rigName -eworker gravitymaster.$rigName -epsw x -dpool stratum+tcp://hub.miningpoolhub.com:20550 -dwal gravitymaster.$rigName -dpsw x -dcoin sc

**Claymore 10 Dual mine UBIQ/SIA**  
-wd 1 -r 1 -epool stratum+tcp://ubiq.hodlpool.com:8009 -ewal $walletETH -esm 0 -allpools 1 -mport -3333 -asm 1 -dpool stratum+tcp://sia-us-east1.nanopool.org:7777 -dwal $walletSC -dcoin sia -allpools 1

**Etherminer .0.11 Nvidia ETH**  
-U -F http://eth-cn.dwarfpool.com:80/0xAEd0067C5294d352BBf07BEC98afBc7F98F89232/$rigname --farm-recheck 200  
-U -S asia.ethash-hub.miningpoolhub.com:20535 -O gravitymaster.$rigName:x --farm-recheck 2000

**Etherminer .0.11 Nvidia PIRL**

-U -S pirl.minerpool.net:8004 -O 0xb75bb0052c65063649a4cd8632c754a4d7c88bfc.$rigName --farm-recheck 2000 -SP 1

-U -S pirl.pool.sexy:6006 -O 0xb75bb0052c65063649a4cd8632c754a4d7c88bfc.$rigName --farm-recheck 2000 -SP 1

**SSH commands and extra code**

Install AMDMEMINFO

wget http://54.67.59.249/amdmeminfo.tar.gz && tar xvfz amdmeminfo.tar.gz && sudo mv amdmeminfo /usr/local/bin

sudo amdmeminfo

Check logs if no change reboot

#!/bin/sh

#Pre-Reqs: apt-get install libio-socket-ssl-perl libnet-ssleay-perl sendemail

CLAYMOREDIR=/usr/local/claymore

RIGID=08

GMAIL=user@gmail.com

GPASS=password

SIZECHECK1=`ls -lt $CLAYMOREDIR | grep log | head -1 | awk '{print $5}'`

sleep 15

SIZECHECK2=`ls -lt $CLAYMOREDIR | grep log | head -1 | awk '{print $5}'`

if [ "$SIZECHECK1" = "$SIZECHECK2" ]

then

sleep 15

SIZECHECK2=`ls -lt $CLAYMOREDIR | grep log | head -1 | awk '{print $5}'`

if [ "$SIZECHECK1" = "$SIZECHECK2" ]

then

sendemail -f $GMAIL -t $GMAIL -u "Mining Rig $RIGID Rebooted @ `date`" -m "Miner Rig $RIGID was rebooted at `date` due to Claymore hang." -s smtp.gmail.com:587 -o tls=yes -xu $GMAIL -xp $GPASS

sleep 3

echo "Claymore hung, rebooting..."

echo "Miner Rig $RIGID was rebooted at `date` due to Claymore hang." >> $CLAYMOREDIR/script-reboot.log

/sbin/reboot

fi

fi

**Reboot if no network connection:**

Create check\_inet script

cat <<EOT >> /root/utils/check\_inet.sh  
#!/bin/bash  
TMP\_FILE=/tmp/inet\_up  
# Edit this function if you want to do something besides reboot  
no\_inet\_action() {  
 shutdown -r +1 'No internet.'  
}  
  
if ping -c5 google.com; then  
 echo 1 > $TMP\_FILE  
else  
 [[ `cat $TMP\_FILE` == 0 ]] && no\_inet\_action || echo 0 > $TMP\_FILE  
fi  
EOT

Change the permissions so it is executable  
chmod +x check\_inet.sh

Edit /etc/crontab using sudo and add the following line (replace yourname with your actual username):  
\*/30 \* \* \* \* /home/yourname/check\_inet.sh

**Sm-monitor: A monitoring and log collection script for simpleminingOS**

<https://github.com/dacrypt/sm-monitor>

**Changed to /etc/sysctl.conf that help reboot system in bad state**

kernel.softlockup\_panic = 1  
kernel.panic = 20  
kernel.panic\_on\_warn = 1  
kernel.panic\_on\_rcu\_stall = 1  
kernel.panic\_on\_io\_nmi = 1  
kernel.panic\_on\_unrecovered\_nmi = 1

kernel.panic\_on\_oops=1

**Misc commands**

watch -n 5 "nvidia-smi --format=csv --query-gpu=gpu\_name,gpu\_bus\_id,vbios\_version,power.draw,fan.speed,temperature.gpu,clocks.video,clocks.mem,clocks.gr"

**XMR-MINER**

sudo apt update && sudo apt install git-core && git clone https://github.com/kusayuzayushko/xmr-miner-smos.git && cd xmr-miner-smos && ./install.sh

**On github**

* Git vram type from AMD cards
  + <https://github.com/sling00/amdmeminfo/network>
* [**OhGodATool**](https://github.com/OhGodACompany/OhGodATool)
  + Allows you to edit PowerPlay in the VBIOS, or in the kernel's pp\_table. You can edit clock, memory, or voltage tables.

**Speed up nv\_oc.sh processing**

Test 1

sudo sed -i 's/\ \&$//g' /root/utils/oc\_nv.sh

Test 2

sudo -i

cd /root/utils/

mv oc\_nv.sh oc\_nv.org

wget --no-check-certificate https://gist.githubusercontent.com/clintar/c737bb7dc5f283a323130db36b0a8aa9/raw/a5130025601394bb039456c1f67faf2777c683df/oc\_nv.sh

chmod +x oc\_nv.sh

**https://gist.github.com/c737bb7dc5f283a323130db36b0a8aa9.git**

**Stop.sh script**

#!/bin/bash

killall xterm -9

killall screen -9

screen -wipe

ps -efw | grep CRON | grep -v grep | awk '{print $2}' | xargs kill

ps -efw | grep fanspeed | grep -v grep | awk '{print $2}' | xargs kill

ps -efw | grep watchdog | grep -v grep | awk '{print $2}' | xargs kill

ps -efw | grep update\_status | grep -v grep | awk '{print $2}' | xargs kill

ps -efw | grep emergency | grep -v grep | awk '{print $2}' | xargs kill

**How to flash bios on all cards of the same type**

#!/bin/bash

num=`sudo /root/utils/atiflash -i | grep pass | wc -l`  
romurl=http://<REPLACE WITH URL>/

romfile=<REPLACE WITH ROM FILE>

echo "$num cards detected"

echo "Downloading ROM file"

wget http://$romurl/$romfile -P /home/miner

echo "killing miner program"

sudo killall -9 screen && screen -wipe

for (( i = 0; i < $num; i++ )); do

Echo “Backing up card :$1”

sudo /root/utils/atiflash -s $i /home/miner/$i.rom

echo "Flashing card: $i"

sudo /root/utils/atiflash -p $i /home/miner/$romfile

done

rm -f /home/miner/$romfile

**Update Nvidia system and GPU drivers (Warning Might break SMOS!!!)**

#!/bin/bash

echo "#####################################"

echo "Delete local cuda old "

echo "#####################################"

sudo rm -rf /etc/apt/sources.list.d/cuda-8-0-local-ga2.list\*

sudo rm -rf /var/cuda-repo-8-0-local-ga2/\*

#echo "#####################################"

#echo "Add Nvidia PPA "

#echo "#####################################"

#sudo apt update

#sudo apt install -y software-properties-common

#sudo add-apt-repository -y ppa:graphics-drivers/ppa

#sudo apt update

echo "#####################################"

echo "Download and install cuda update "

echo "#####################################"

wget https://developer.download.nvidia.com/compute/cuda/repos/ubuntu1604/x86\_64/cuda-repo-ubuntu1604\_9.1.85-1\_amd64.deb

sudo dpkg -i cuda-repo-ubuntu1604\_9.1.85-1\_amd64.deb

sudo wget -qO - http://developer.download.nvidia.com/compute/cuda/repos/ubuntu1404/x86\_64/7fa2af80.pub | sudo apt-key add -

sudo apt update

echo "#####################################"

echo "Download and install Nvidia "

echo "#####################################"

sudo apt update -y && sudo apt upgrade -y && sudo apt dist-upgrade -y

sudo apt -y install cuda --no-install-recommends

sudo mv /etc/vdpau\_wrapper.cfg /home/miner/

sudo apt-get -f -y install

sudo apt -y autoremove

sudo mv /home/miner/vdpau\_wrapper.cfg /etc

echo "######################################"

echo " cleaning up "

echo "######################################"

sudo apt clean -y && sudo apt autoclean -y && sudo apt autoremove -y

sudo rm -rf /var/lib/apt/lists/\*

rm cuda-repo-ubuntu1604\_9.0.176-1\_amd64

exit

#test stuff

sudo rm /usr/lib/nvidia-384/libEGL.so.1.org

sudo rm /usr/lib32/nvidia-384/libEGL.so.1.org

sudo ln -s /usr/lib/nvidia-384/libEGL.so.384.98 /usr/lib/nvidia-384/libEGL.so.1

sudo ln -s /usr/lib32/nvidia-384/libEGL.so.384.98 /usr/lib32/nvidia-384/libEGL.so.1

**#Install nvidia driver 387.21 with Cuda 9 via APT (broken right now do not do!)**

sudo apt-get download nvidia-387 nvidia-settings

sudo dpkg --remove --force-depends nvidia-384 nvidia-384-dev nvidia-libopencl1-384 nvidia-modprobe nvidia-opencl-icd-384 nvidia-settings

sudo dpkg --install nvidia-387\_387.12-0ubuntu0~gpu16.04.1\_amd64.deb

sudo dpkg --install nvidia-settings\_387.22-0ubuntu0~gpu16.04.1\_amd64.deb

**AMD Mining ROCM Kernel AMD Drivers for Dag fix**

#!/bin/bash

CONFIG\_FILE="/root/config.txt"

source $CONFIG\_FILE

MODULE\_AMDGPU=`lsmod | grep amdgpu | wc -l`

if [ $MODULE\_AMDGPU -gt 0 ]; then

cd /var/tmp/

wget -qO - http://repo.radeon.com/rocm/apt/debian/rocm.gpg.key | sudo apt-key add -

sudo sh -c 'echo deb [arch=amd64] http://repo.radeon.com/rocm/apt/debian/ xenial main > /etc/apt/sources.list.d/rocm.list'

sudo apt-get remove -y --allow cuda-repo\*

sudo apt-cache clean -y

sudo apt-cache autoclean -y

sudo apt-get update -y

sudo apt-get install rocm -y

sudo sed 's/nk=0/nk=0 amdgpu.vm\_fragment\_size=9 /' -i /etc/default/grub

sudo apt-get purge -y `dpkg --list | grep "linux-headers\|linux-image" | grep -v "rocm" | awk '{print $2}' |tr "\n" " "`

sudo update-initramfs -u

sudo update-grub

sudo apt-cache clean -y

sudo apt-cache autoclean -y

echo "Beta ROCM update completed, reboot in 60 seconds"

sync &

sleep 60

sync

echo "Rebooting"

sudo reboot

sleep 3600

else

echo "This RX OS doesnt have any AMD GPU plugged in. Aborting"

sleep 60

reboot

exit

fi

**Wattage and efficiency reports when hovering over rig name (By clintar)**

Create a new file called mod1.sh

#!/bin/bash

ROCM\_POWER=`/opt/rocm/bin/rocm-smi -P |sed -e 's/=//g'|sed 1,4d|head -n -3|sed -e "/\bCannot\\b/d"|sed -e "s/ \t\t: Average GPU Power: //g"`

ROCM\_POWER\_CLEANED=`echo "${ROCM\_POWER}"|sort -t [ -k 2|sed -e ':a;N;$!ba;s/\n/<br>/g'`

AMDGPU\_VERSION+="<br>"

AMDGPU\_VERSION+=${ROCM\_POWER\_CLEANED}

NVIDIA\_SMI=''

if [ -x /usr/bin/nvidia-smi ] ; then

NVIDIA\_SMI=`nvidia-smi --format=csv --query-gpu=name,power.draw `

AMDGPU\_VERSION+="<br>"

AMDGPU\_VERSION+=${NVIDIA\_SMI}

fi

if netstat -nlp|grep \:3333 >/dev/null ; then

CLAYMORE\_LINE=`echo '{"id":0,"jsonrpc":"2.0","method":"miner\_getstat1"}' | nc localhost 3333`

CLAYMORE\_ETH\_TOTAL=`echo "${CLAYMORE\_LINE}"|jq '.result[2]'|sed -e "s/\"//g"|awk -F "\;" '{print $1}'`

CLAYMORE\_2ND\_TOTAL=`echo "${CLAYMORE\_LINE}"|jq '.result[4]'|sed -e "s/\"//g"|awk -F "\;" '{print $1}'`

TOTAL\_WATTS=`echo "${ROCM\_POWER}"|awk '{sum += $2;} END {print sum;}'`

TOTAL\_WATTS=`printf "%.0f" ${TOTAL\_WATTS}`

CLAYMORE\_ETH\_EFFICIENCY=$(($CLAYMORE\_ETH\_TOTAL / $TOTAL\_WATTS))

CLAYMORE\_2ND\_EFFICIENCY=$(($CLAYMORE\_2ND\_TOTAL / $TOTAL\_WATTS))

AMDGPU\_VERSION+="<br>Efficiency: ETH: "

AMDGPU\_VERSION+=`printf "%0.2f" ${CLAYMORE\_ETH\_EFFICIENCY}`

AMDGPU\_VERSION+=" kH/W, DUAL: "

AMDGPU\_VERSION+=`printf "%0.2f" ${CLAYMORE\_2ND\_EFFICIENCY}`

AMDGPU\_VERSION+=" kH/W"

fi

Next edit /root/utils/stats\_json.sh and put "source /root/utils/mod1.sh" above ## LOAD DATA TO JSON line

**See the public IP on the dashboard:**

Edit /root/utils/stats\_json.sh comment out the original ipAddress line and insert these lines:

privateIpAddress=`/sbin/ifconfig eth0 | grep 'inet addr:' | cut -d: -f2 | awk '{ print $1}'`

publicIpAddress=`curl -s http://ipv4.icanhazip.com`

ipAddress="Private: $privateIpAddress Public: $publicIpAddress"

**Update etherminer**

sudo -i

cd /root/miner\_org/

wget <https://github.com/ethereum-mining/ethminer/releases/download/v0.12.0rc3/ethminer-0.12.0rc3-Linux.tar.gz>

tar xvzf ethminer-0.12.0rc3-Linux.tar.gz

mv bin/ethminer ./ethminer-0.11.0/ethminer  
rm -rf bin/

rm ethminer-0.12.0rc3-Linux.tar.gz

**Change repo to local country**

* From PL to US

sed -i -e 's/pl.archive/us.archive/g' /etc/apt/sources.list

* From PL to KR

sed -i -e 's/pl.archive/kr.archive/g' /etc/apt/sources.list

**Install updated ccminer-tpruvot to work with CUDA 9**

* Install system and driver updates
* Install CUDA 9RC

sudo -i

apt-get install git cmake automake libssl-dev

git clone <https://github.com/tpruvot/ccminer.git>

mv ./ccminer ccminer-tpruvot-git

cd ccminer-tpruvot-git

./build.sh

cp ./ccminer /root/miner\_org/ccminer-tpruvot-v2.1/ccmine

**Install Webmin**

sudo -i

echo "deb http://download.webmin.com/download/repository sarge contrib" > /etc/apt/sources.list.d/webmin.list

wget http://www.webmin.com/jcameron-key.asc

apt-key add jcameron-key.asc

rm jcameron-key.asc

apt-get update  
apt-get install -y apt-transport-https  
apt-get install -y webmin

**How to set the CPU to MAX Performance and make it persistante**

#!/bin/bash

echo "performance" >/sys/devices/system/cpu/cpu0/cpufreq/scaling\_governor

echo "performance" >/sys/devices/system/cpu/cpu1/cpufreq/scaling\_governor

#Change this to the max CPU speed

echo 2900000 > /sys/devices/system/cpu/cpu0/cpufreq/scaling\_min\_freq

echo 2900000 > /sys/devices/system/cpu/cpu0/cpufreq/scaling\_min\_freq

**Stat info**

sudo apt-get install python-setuptools python-dev build-essential python-pip dstat

mkdir -p /home/miner/.cache/pip/http

sudo chmod 777 /home/miner/.cache/pip/http

pip install --upgrade pip

Sudo pip install --upgrade virtualenv

sudo pip install nvidia-ml-py

wget https://raw.githubusercontent.com/datumbox/dstat/master/plugins/dstat\_nvidia\_gpu.py

sudo mv dstat\_nvidia\_gpu.py /usr/share/dstat/

**Install tmux/tmuxinator**

sudo apt install -yqqu python-software-properties software-properties-common

sudo add-apt-repository -yqqu ppa:hnakamur/tmux

sudo apt update

sudo apt install tmux

# Install Powerline Fonts

git clone https://github.com/powerline/fonts.git --depth=1

cd fonts

sudo ./install.sh

cd ..

rm -rf fonts

# Powerline Fonts End

# tmux config

git clone https://github.com/gpakosz/.tmux.git

ln -s -f .tmux/.tmux.conf

cp .tmux/.tmux.conf.local .

#tmuxinator

sudo apt install -y ruby

sudo gem install tmuxinator

mkdir -p ./config/tmuxinator

wget <https://raw.githubusercontent.com/tmuxinator/tmuxinator/master/completion/tmuxinator.bash>

mv ./tmuxinator.bash ./config/tmuxinator/tmuxinator.bash

#add to ./bashrc

export EDITOR='nano'

source ~/.config//tmuxinator/tmuxinator.bash

# tmuxinator

export EDITOR='nano'

tmuxinator new smos

windows:

- Monitor:

layout: tile

# Synchronize all panes of this window, can be enabled before or after the pane commands run.

# 'before' represents legacy functionality and will be deprecated in a future release, in favour of 'after'

# synchronize: after

panes:

- screen -x miner

- watch -n 5 "nvidia-smi --format=noheader,csv --query-gpu=gpu\_name,gpu\_bus\_id,vbios\_version,power.draw,fan.speed,temperature.gpu,clocks.video,clocks.mem,clocks.gr"

- htop

- cd /home/miner

**Fix local settings:**

export LANGUAGE=en\_US.UTF-8

export LANG=en\_US.UTF-8

export LC\_ALL=en\_US.UTF-

locale-gen en\_US.UTF-8

dpkg-reconfigure locales

**Install ccminer alexis78 fork Ubuntu 16.04**

cd /root/miner\_org

git clone https://github.com/alexis78/ccminer.git

mv ./ccminer ./ccminer-alexis78

cd ./ccminer-alexis78

export LD\_LIBRARY\_PATH=/usr/local/cuda/lib

export PATH=$PATH:/usr/local/cuda/bin

./build.sh

echo "Finished"

exit

**Nodes and other ways to make money**

**Staking Node**

* Stratis

**Storage**

* Storj: Installs NTP sync and Storj, change ETH address with your own that you have the private KEY! (MEW), also change the size you want to allow storj to use.
* Setup UPNP or port forwarding on router, if port forward need to setup a rule for each server and change the range in config json file.

cat <<EOT >> install-storj.sh

#!/bin/bash

sudo sed -i -e 's/kr.archive/us.archive/g' /etc/apt/sources.list

sudo sed -i -e 's/pl.archive/kr.archive/g' /etc/apt/sources.list

sudo apt install -y git ntpdate libssl-dev nodejs python build-essential

sudo dpkg-reconfigure tzdata

sudo ntpdate 0.asia.pool.ntp.org ntp.ubuntu.com pool.ntp.org

sudo wget https://deb.nodesource.com/setup\_6.x

sudo chmod +x setup\_6.x

sudo ./setup\_6.x

sudo rm ./setup\_6.x

sudo apt-get -y install nodejs

sudo npm install --global storjshare-daemon --unsafe-perm

sudo mkdir /mnt/storj

sudo chmod 777 /mnt/storj

EOT

chmod +x install-storj.sh

./install-storj.sh

sudo -i

cat <<EOT >> /etc/cron.daily/ntpdate

sudo pip install --upgrade pip #!/bin/bash

sudo ntpdate 0.asia.pool.ntp.org

EOT

exit

#!/bin/bash

rm -rf .config/storjshare/config/

storjshare create --noedit --size 90GB --storj=0x0517414451423b1C36f101f68f021E2781cfd2AC --storage=/mnt/storj/ --logdir /tmp --rpcport 4025 --tunnelportmin 4026 --tunnelportmax 4028

rm start-farming.sh

cat > start-farming.sh <<'EOF'  
STORJ=$(ls /home/miner/.config/storjshare/configs/\*)

storjshare killall  
storjshare daemon  
rm /home/miner/.config/storjshare/logs/\*  
storjshare start --config $STORJ  
EOF

chmod +x start-farming.sh  
./start-farming.sh

cat > ./storj-watchdog.sh <<'EOF'

#!/bin/bash

STORJ=$(ls /home/miner/.config/storjshare/configs/\*)

#echo $STORJ

APP=$(ps aux | grep -v grep | grep storjshare)

#echo $APP

if [ -z "$APP" ];

then

echo "Restart storjshare-daemon" storjshare daemon

fi

APP=$(ps aux | grep -v grep | grep 'farmer.js --config')

#echo $APP

if [ -z "$APP" ];

then

echo "Restart farmers"

storjshare start --config $STORJ

fi

EOF

chmod +x storj-watchdog.sh

sudo -i

cat > /etc/cron.hourly/storj-watchdog <<'EOF'

#!/bin/bash

/home/miner/storj-watchdog.sh

EOF

Exit

#remove

sudo storjshare killall

sudo apt -y purge nodejs

sudo rm -rf /usr/lib/node\_modules

sudo rm -rf /home/miner/.npm

sudo rm -rf /home/miner/node\_modules

sudo rm -rf /home/miner/.config/storjshare

sudo rm -rf /mnt/storj/

**Master Node**

* Dash, PIVX, MartxCoin, Pirl

**Passive income by staking**

* COSS.IO, PIVX, NAV, LISK, TenX

**Server Node**

* [ZenCash Setup](https://blockoperations.com/build-zencash-secure-node-part-2-5-test-tls-secnodetracker/)

**Lending on exchange using Bots**

* [**BitBotFactory/poloniexlendingbot**](https://github.com/BitBotFactory/poloniexlendingbot)

**Renderfarms**

* [**RNDR**](https://rendertoken.com/)
  + ICO Going on now will have product Beta Q2 2018. This could be a major revenue generator for GTX 1080TI cards. Think about buying them over the next 6-12 months so you are ready when this goes live. They are looking at $80 a day per card!

Test notes

rsync -avv /root/utils/ miner@10.220.11.24:/root/utils/

rsync -avv /root/miner\_org/ miner@10.220.11.24:/root/miners\_org/

rsync -avv /root/\*.sh miner@10.220.11.24:/root/