



Analysis of System Performances during Crypto Mining

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**Digital Forensics and Cyber Security
Group Project
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Abstract

Cryptocurrency is a digital currency, unlike any other currency known to man. With cryptography, this currency is secured and managed. Cryptocurrency is known as a decentralised form of currency. Unlike Euro, Dollar, and Pound Sterling, which are all monitored and controlled centrally by massive banks, cryptocurrency is not monitored or controlled hence why it is known as a decentralised currency. This means that anyone in possession can send or receive various types of cryptocurrencies, without there being a middleman such as a bank or government agency. Perhaps the most well-known cryptocurrency out there is Bitcoin (BTC). Bitcoin was invented by the creator of cryptocurrency, Satoshi Nakamoto in January 2009. Some benefits of using cryptocurrency over a physical currency is that it offers better security, greater privacy and in most cases lower transaction fees which is attractive to its user base. In the last few years cryptocurrency has grown massively, and some companies such as Tesla and Microsoft accept cryptocurrency as a form of payment. Both massive companies accept bitcoin as it is the most well-known crypto, along with its massive user base, low transaction fees for its users and of course, most importantly, it is the most stable cryptocurrency in comparison to others such as Ethereum (ETH) and Litecoin (LTC).

The Blockchain network is a register for all transactions made using cryptocurrency, spread across an entire network of computers instead of one single server system. Each transaction recorded is assigned its own block and each block is added to a linear chain. Once they are set in, they cannot be changed without making the whole change invalid. This means that security is ensured within the blockchain network as any attempt to alter transactions in the past will be detected and rejected immediately by the network.

Crypto mining is a process that can be performed by pretty much anyone that has a PC with a decent GPU. The process requires a user's computer to perform complicated mathematical equations and validate transactions performed by users on the blockchain. The user would validate and add new transactions to the blockchain network and in return receive cryptocurrency as a reward for their work.

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1. Introduction

This research paper will be focused on a topic related to cryptocurrency and crypto mining. This paper will offer an in-depth information for the reader who has a plan on getting himself/herself into the cryptocurrency and crypto mining space, it will focus on the advantages and disadvantages that they would most likely come across and how to prevent them.

Crypto mining is a popular procedure to get cryptocurrency into your personal setup crypto wallet/hardware wallet. Crypto mining can be performed on multiple devices such as computers, laptops, and phones both Android & IOS, the phone method is less efficient but will still get the procedure done over a longer time.

Throughout the workings on the research paper, to perform the test between the performances of multiple computers/laptops, there was a minimum of 9 devices collected which then the crypto mining tools were installed on each. After the tools are installed, the statistics and performances were recorded and compared among all devices, this is mainly completed by keeping track of the hash rate of the graphics card, the speed on how fast it will be able to mine a coin and how different the specification and prices is between the devices overall.

Throughout this experiment there is a total of 8 laptops and 1 pre-built custom computer. The laptop will be (Asus ROG Strix G15 G513IH-HN036T, HP Laptop 15s-fq1xxx, HP Spectre x360 Convertible 13-w0XX, Packard Bell EasyNote TE69KB, HP Beats 15 Notebook PC, AVITA NS14A6, Lenovo V330-151KB and finally the Custom-Built PC (DESKTOP-17ILC2K).

In order to test out the different open-source mining tools we had to install the most known tools that have been created, the open-source tools that have been used are unMineable Miner MFI, XMRig 6.18.1. It was planned to go ahead with these tools as they are extremely popular and recommended by many crypto miners themselves. These tools were specifically chosen as they have a massive difference among themselves. The difference between them is that XMRig is a cryptocurrency mining tool that is only CMD based whereas unMineable Miner MFI is a UI friendly tool and is extremely recommended to beginners as everything is labelled and straight forward.

2. What is Cryptocurrency?

The term "cryptocurrency" refers to a system that makes use of cryptography to permit the distributed and decentralized exchange of digital tokens in a secure way. Each crypto coin has a value, and it can be traded among crypto traders, this method is extremely similar between people sending each other

money via bank transfer, PayPal etc. The first ever cryptocurrency that has ever been made was called “Bitcoin”, it starts getting attention and began using it to trade back in January 2009. While Bitcoin was released multiple coins have been created and released in the background, they have the same methods and how they are worth etc, the only difference is that each coin has its own value. (Eli Dourado, 2014)

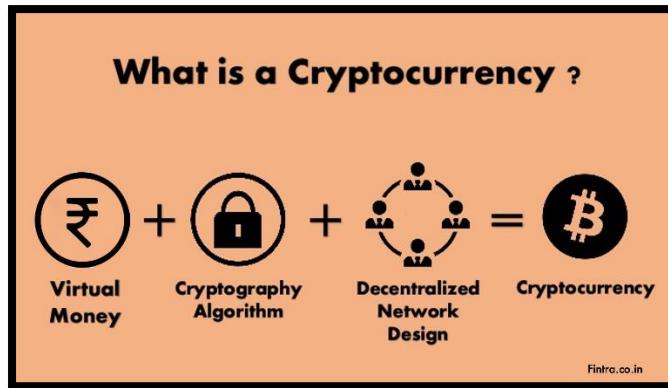


Figure 1 What is cryptocurrency

2.1 What is a Crypto Wallet

A crypto wallet is compiled of some software that contain public and private keys and uses Blockchain to send or to receive cryptocurrency. The crypto coins that are stored within these crypto wallets such as Ethereum, Bitcoin, Litecoin etc. To be able to trade, receive or send the coins a crypto wallet is required to be created. These cryptocurrencies are not all stored in one specific location instead they just exist in transaction records that are located on the blockchain. (Nagendra Singh Yadav, Vishal Goar, Manoj Kuri. 2020)

2.1.1 How to setup a cryptocurrency wallet

To purchase any cryptocurrencies, the first step any person is required to do is to register and open a wallet on any of these sites: Coinbase Wallet, MetaMask, Trust Wallet, Ledger Nano S Plus, Electrum, Blue Wallet, Exodus, Crypto.com. These are the top picks for anyone who is a beginner in crypto according to (Money. 2022)

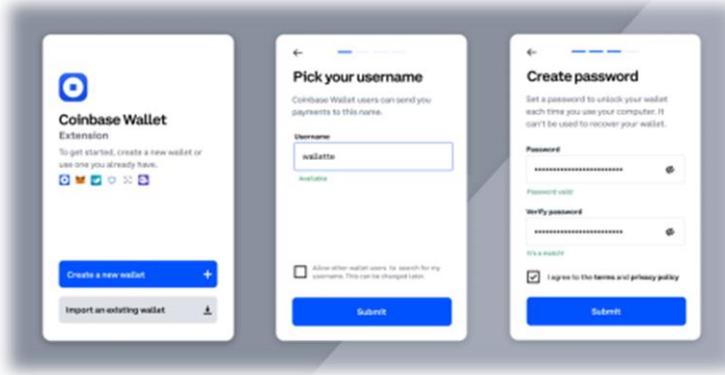


Figure 2 How to setup a crypto wallet step-by-step via Coinbase

1.1.2 How to purchase Cryptocurrency

After the individual has created their own personal crypto wallet, the next step is for the user to enter his personal details such as email, address, phone number etc. After the user has registered all this information the user will then need to link his crypto wallet to their personal bank or credit card in order to place orders. Once these steps are all done, the user has the option to purchase any type of cryptocurrency that is listed on that specific website.

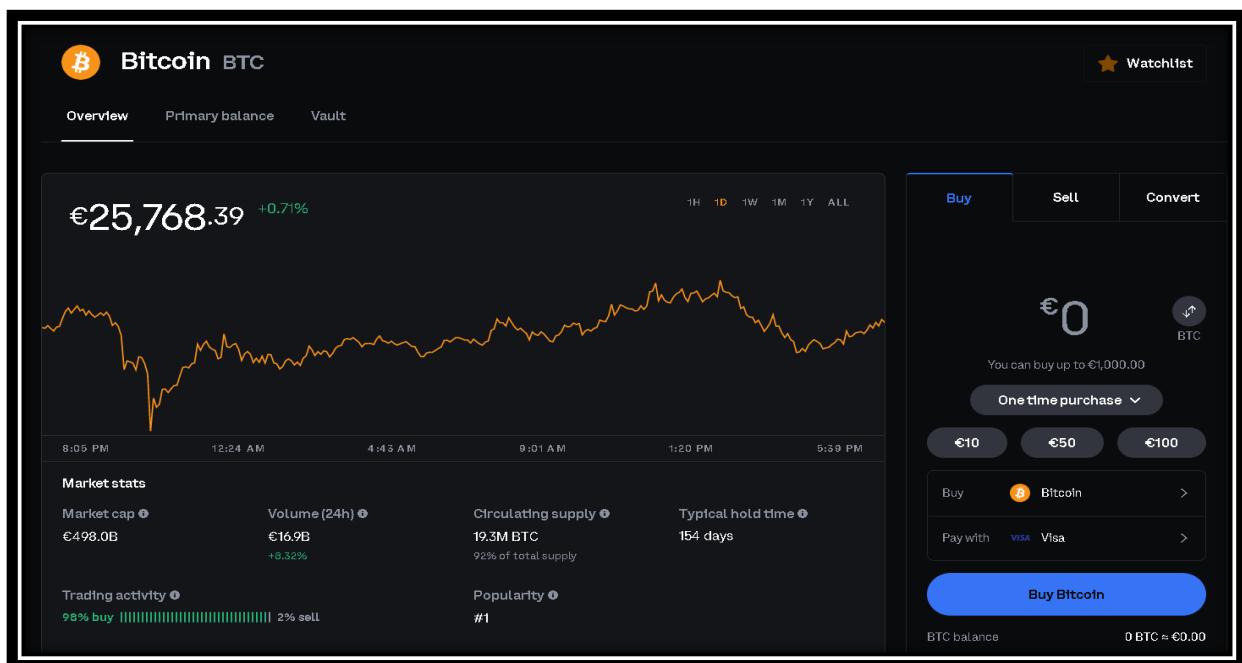


Figure 3 Purchasing a specific coin. Via Coinbase

3. Top Cryptocurrencies to start mining.

Throughout the years, cryptocurrencies have been surfing through value, they never remain in one position and that is that they are constantly changing value depending on how much it is being bought by cryptocurrency investors.

After some research has been done, it came to a final on which cryptocurrencies are recommended and popular to mine. Here is a small list of the top 5 cryptocurrencies which are recommended by experienced miners throughout 2023.

3.1 Bitcoin

Bitcoin (BTC) is one of the most popular cryptocurrencies out there, it is popular for both investing and mining. Bitcoin is currently at a value of \$30,000 but that does not mean it will remain at that value, for example, throughout the year of 2022, Bitcoin has decreased to \$16,000 per coin which is a massive impact on the investors who have invested when it was at a higher value. (Shiva Ganesh. 2023)

Here is a diagram that shows the price of Bitcoin since its release:

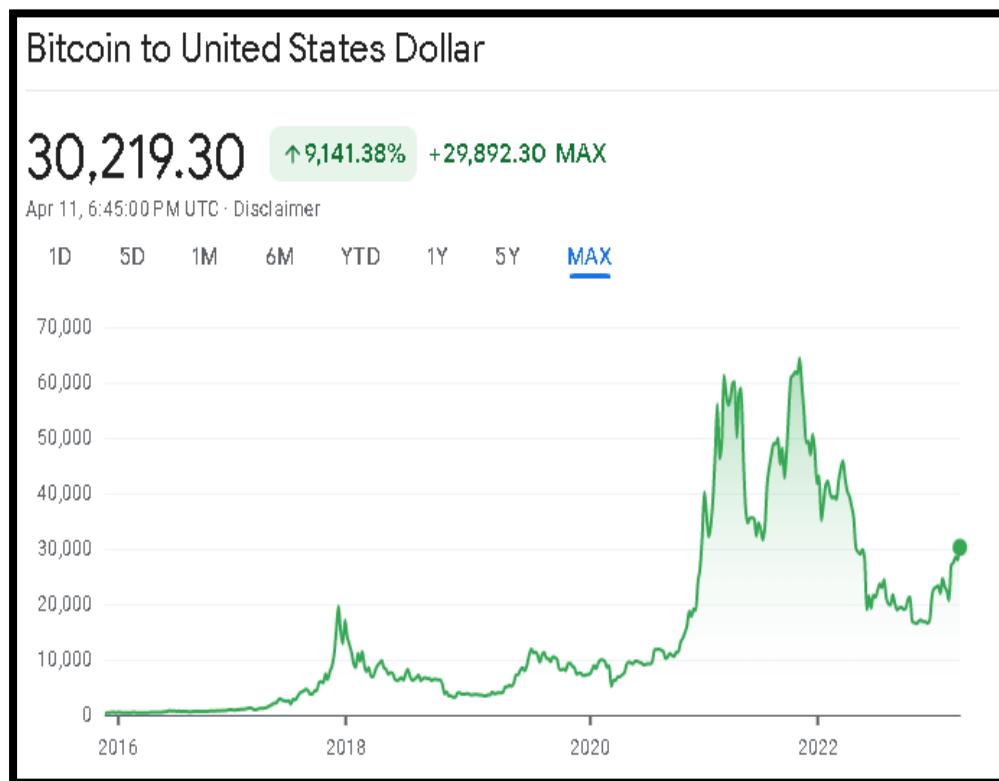


Figure 4 Bitcoin Price History

3.2 Ethereum

Ethereum (ETH) is a coin that most miners mine for themselves. Ethereum can be mined with the use of a CPU (Processor) or GPU (Graphics Processing Unit) and uses the Ethash hashing algorithm. Take note that since the coin has recently been upgraded to Ethereum 2.0 and has switched from Proof-of-

Work (PoW) to Proof-of-Stake as its method, miners are still able to mine for a couple more years while using the Proof-of-Work method on Ethereum.

Here is a diagram that shows the price of Ethereum since its creation:

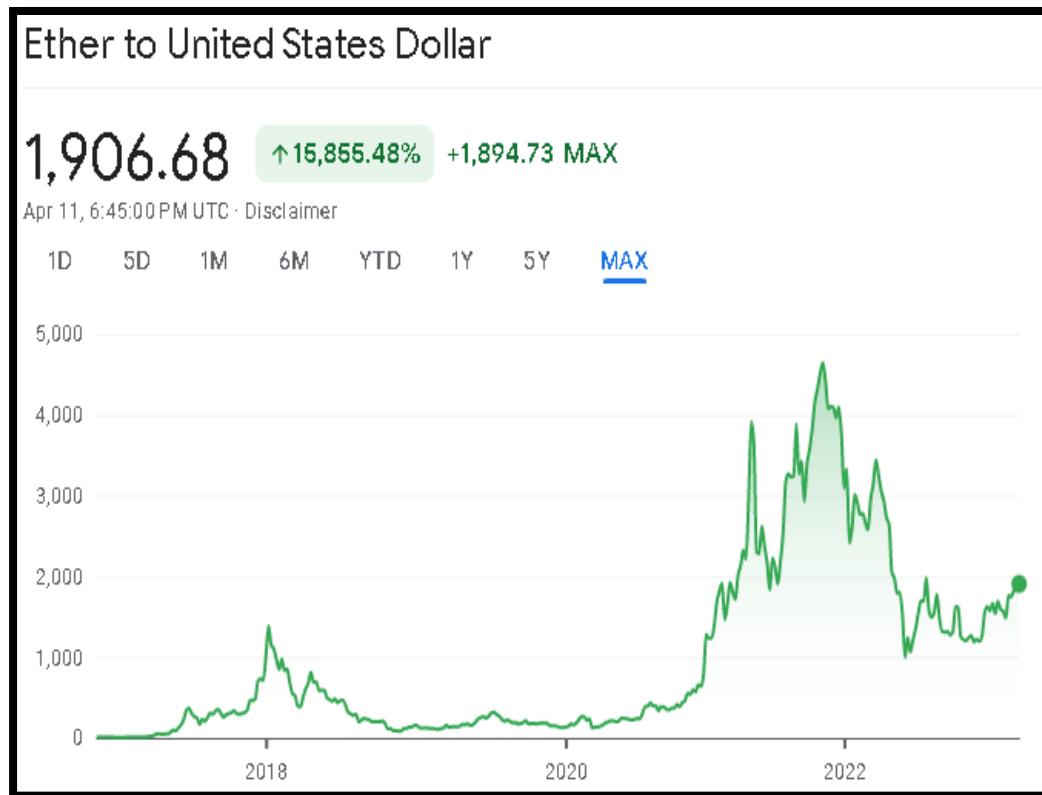


Figure 5 Ethereum Price History

3.3 ZCash

ZCash (ZEC) is known as a great cryptocurrency to mine in the crypto field as its team are extremely hard working on its anonymity. However, even if it is ASIC-resistant architecture, people who mined ZEC have noticed that it is not that easy and it is quite difficult. ZCash is a coin for the miners who are interested in long-term investment as it rises and drops in value often. Whenever attempting to mine ZCash, it is required for the person to have as much Random Access Memory (RAM) as possible, this can lead to a higher cost which would not satisfy miners too much.

Here is a chart that shows the value of ZCash throughout the years:



Figure 6 ZCash Price History

3.4 Dash

Dash coin is a hard variant crypto coin compared to Litecoin. Dash has been invented in January 2014. Dash at the beginning was being used as PrivateSend and InstantSend, in other words, it means that Dash was used to transfer balance across countries in no time. X11 is the method which is used for encoding Dash. In 2023, there is around 9.96 million Dash coins in the crypto space.

Here is a graph that shows the history value of Dash coin:



Figure 7 Dash Price History

3.5 Litecoin

Litecoin (LTC) is placed on the top 10 most profitable coin that has ever been created and invested in. When LTC is being mined, it uses the Scrypt algorithm, and it is one of the most known and successful coin to be mined with the use of a GPU. In the crypto mining field, investors see Bitcoin as gold, and they see Litecoin as silver. Litecoin was created to be an alternative to Bitcoin.

Here is a graph that shows the history value of Litecoin:



Figure 8 Litecoin Price History

4. CPU and GPU for Cryptocurrency Mining

There are multiple methods when it comes to cryptocurrency mining, such as GPU, CPU, ASIC, FPGA. Throughout this paper, it will be more related and focused on CPU and GPU mining as it is a more common method than the remaining methods. (Megan Frydel. 2018)

4.1 What is a CPU?

The term CPU stands for Central Processing Unit. The CPU is more known as the *brain* of the system. Its purpose is to execute and perform wide range of tasks, these include Running software applications / Handling Operating System / Performing arithmetic and logic operations and finally processing the output and the input. (Megan Frydel. 2018)



Figure 9 What a CPU looks like

There are many devices that use CPU within their system that others do not even know of. Some other examples that use CPUs are desktops/laptops/smartphones/tablets/smart televisions and game consoles. (Megan Frydel. 2018)

Intel and AMD are the most popular companies that manufacture CPUs for desktops/laptops, whereas when it comes to other devices such as smart phones and tablets, the most popular for manufacturing CPUs are Apple, NVIDIA, and Qualcomm. (Megan Frydel. 2018)

When it comes to using a CPU within a system, it is extremely common that they overheat and could easily damage from too much heat. To stop this from happening, a fan cooler or water cooler is meant to be placed above the CPU which then the fan will only focus on that specific location causing it to not overheat so easily. Most recommended temperature for a CPU is between 55-70 degrees. (Megan Frydel. 2018)



Figure 10 CPU Cooler

[4.2 What is a GPU?](#)

The term GPU stands for Graphics Processing Unit, the main functionality for a GPU is to specifically handle display function. The main purpose of a GPU is to render images on screen, render animations and different types of images that are displayed on a monitor. (Megan Frydel. 2018)



Figure 11What a GPU looks like

Installing a GPU is an extremely easy process, on the motherboard there is PCIe x16 slot, you place the motherboard in that until there is a click sound, that sound means that the GPU is locked into place and will not snap or fall out. (Megan Frydel. 2018)

The more high-end the GPU is, the better the resolution and faster the render will be when an image will come to being processed. (Megan Frydel. 2018)

For many applications that call for repeating calculations or actions, a GPU frequently serves as a vector processor, processing multiple operations over multiple sets of data. (Megan Frydel. 2018)

[4.2.1 CPU & GPU mineable cryptocurrencies.](#)

Bitcoin	Both CPU & GPU Mineable
Ethereum	Both CPU & GPU Mineable
Dash	Both CPU & GPU Mineable
Litecoin	Both CPU & GPU Mineable
ZCash	Both CPU & GPU Mineable

[4.3 Advantages of Crypto Mining](#)

While everything in this world has an advantage and disadvantage view on things, here is a list of the possible advantages of crypto mining.

- Profitability: If the person who intended to try-out crypto mining and had the correct specifications and system it will be extremely likely that he will result in a profit towards the

end of his mine. Overall crypto mining is, the more money the person adds into his own system and has the high-end specifications within his system, the higher the result will be in the amount of crypto that has been mined.

- Requirements: When it comes to crypto mining, people like to give it an attempt as it does not require anything specific like high end GPUs or CPUs, all it requires is having any sort of GPU/CPU either high end or low end. That does not matter but it will be extremely noticeable in the result after the mining is completed.
- Security: While going through the process if crypto mining there is no need of worrying about someone accessing your wallet or stealing any coins that have been mined. Each coin has a specific algorithm method in which it is encrypted. This is extremely difficult for any intruder to crack and steal any value of coin.
- Environmental: There are many types of different way in which people are able to perform crypto mining. Some miners also use solar panels in order to power their own mining station, some even power their stations by using wind power. This is an important advantage as it helps the environment as a whole by reducing carbon emissions.

4.4 Disadvantages of Cryptocurrency

- Electricity Consumption: When running a cryptocurrency mining session, it requires a lot of electricity and power in order to push the system to its limits and mine as much as possible.
- Challenging: It might be difficult for individuals to compete with larger mining companies because crypto mining gets harder as more miners join the network. This may make it more difficult to profit from cryptocurrency mining.
- Region Regulation: There may be regulatory barriers or uncertainties that could have an influence on the profitability of crypto mining because the legal status of cryptocurrencies and crypto mining differs by nation and is still developing.
- Expensive: The cost of purchasing the specialized hardware and software needed for crypto mining can be high, and it may not be viable if the value of the cryptocurrency being mined declines.

5. Tools used for Crypto Mining

There is a vast amount of crypto mining tools out there that can be used. From beginner level to professional crypto mining systems that mine across several devices, there are a lot of options.

Most crypto mining software tools on the market these days have two main options on what they will use to mine different cryptocurrencies with. The options are between GPU mining and CPU mining.

Generally speaking, GPUs are better for crypto mining as they have been designed to calculate extremely complex mathematical equations, whereas CPUs are better used to complete many different tasks at the same time. Mining crypto with a GPU is a lot more efficient than mining with a CPU as they can process large numbers of calculations at the same time. One thing that is worth noting is that depending on the cryptocurrency that you are trying to mine, can decide whether GPU is more effective than CPU mining. Depending on the user's device it may not actually contain a GPU. For example, most current laptops on the market have a built-in graphics chipset, so this would not work for GPU mining and the user would have to mine using CPU instead. GPU cards are commonly found within high end gaming laptops and PCs, in this case the user can opt into GPU mining which is more efficient than CPU mining. <https://www.cryptimi.com/guides/cpu-vs-gpu>

Throughout this procedure, five different types of crypto mining software's were involved in order to get an advanced result of the procedure.

5.1 unMineable Miner (MFI)

The first tool that will be used is unMineable Miner (MFI).

unMineable Miner <https://www.unmineable.com/miner>



Figure 12 unMineable Logo

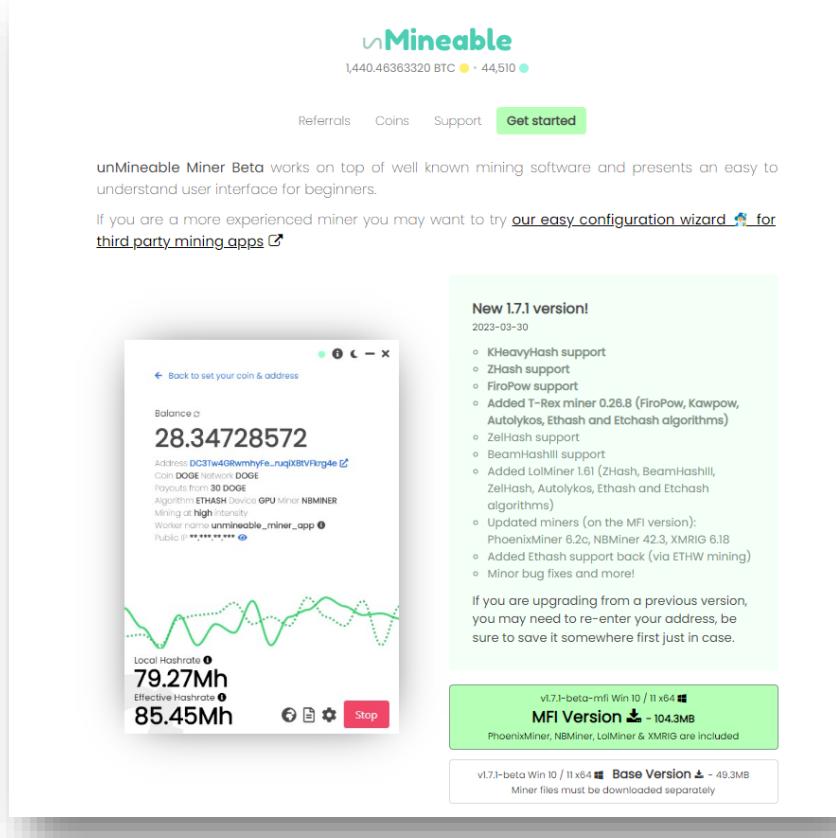
The unMineable Miner is a great tool for beginners looking to get into mining cryptocurrency. This tool offers a GPU mining and CPU mining mode. This platform is very easy to use and offers the user to mine a range of cryptocurrencies such as Bitcoin (BTC), Ethereum (ETH) and Litecoin (LTC). This mining platform allows the user to mine several cryptocurrencies simultaneously, this increases the number of profits generated from the mining tool. unMineable does charge a fee for using its mining platform. This ranges from 1% to 3% depending on the cryptocurrency being mined. unMineable is a simple to use crypto mining tool that comes with a simple User Interface that can be easily navigated through by the user.

6. Tool Setup

In this section it will highlight the installation of the tools and how they are setup on a system, the tools that will be explained on set up will be the tools that have been mentioned in the header before – (Tools for Crypto mining)

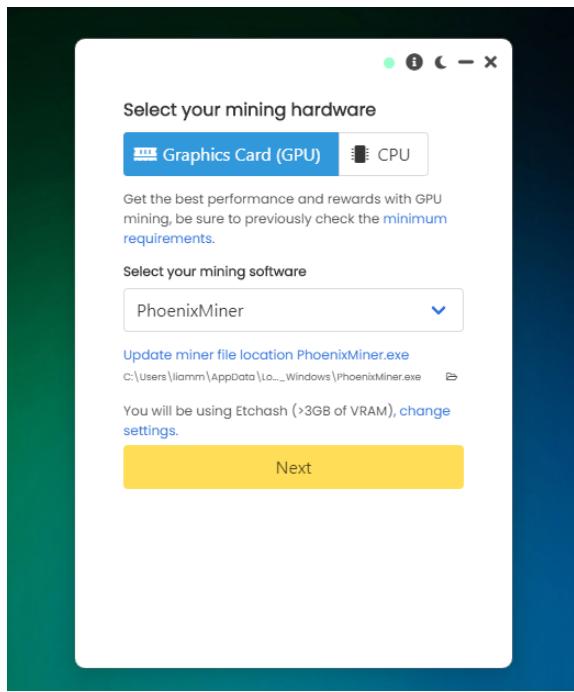
6.1 unMineable Miner (MFI) Setup

To install this tool, I went to <https://www.unmineable.com/miner> and clicked the green button to install the ‘MFI Version’ of unMineable Miner.



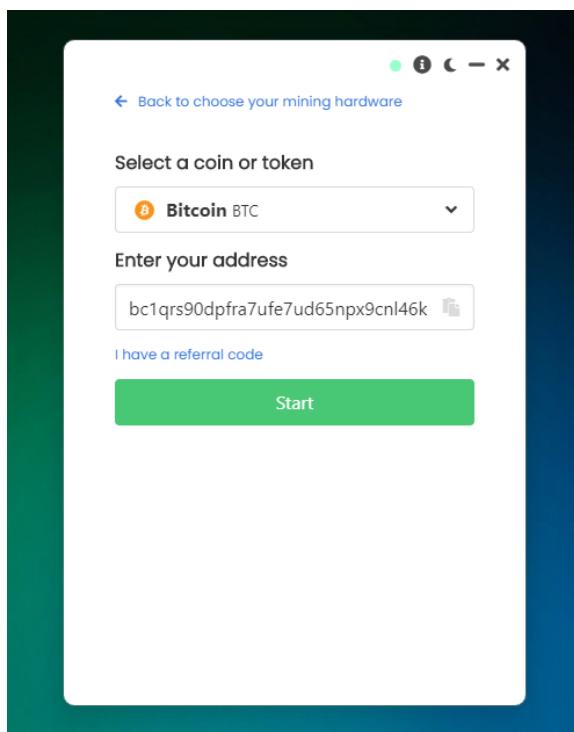
Once I tried to install this, it prompted me that it had found a virus within the file and cancelled the download. After some research I found this was a false positive and I was then confident to bypass this block as I knew it was not of harm to my windows machine. To bypass and install this I temporarily had to disable my Windows Defender Virus Protection setting.

Once downloaded this very easy to use and attractive User Interface appeared once I installed it.



The tool prompted me to select the mining hardware I intended to use, Graphics Card (GPU) or CPU. Once I picked GPU, I was then asked to select mining software, in which I left as the default setting 'PhoenixMiner'. I then selected next to bring me onto the next page of setup.

This was the next page of the unMineable tool setup. On this screen there were two options that I had to configure.

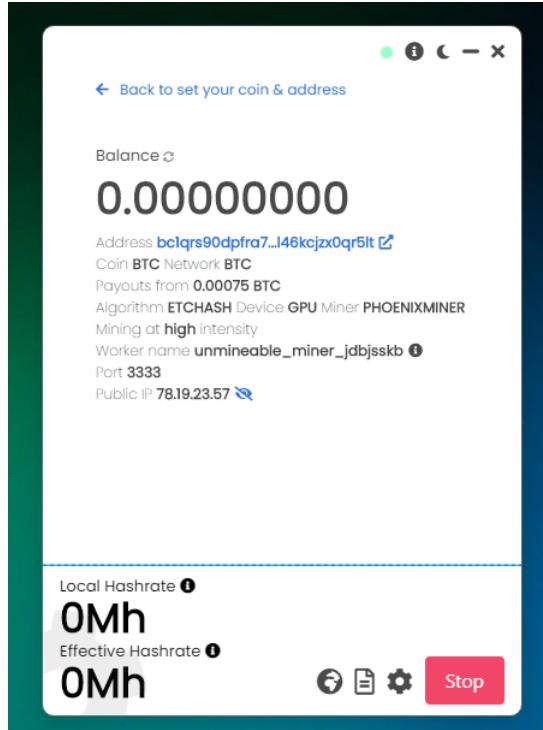


The first part was to select what type of cryptocurrency you would like to mine – I chose to mine Bitcoin (BTC). The second option was to enter your wallet address so that the tool could deposit into the wallet you choose. I used my personal crypto wallet address for this –

Wallet Address: [bc1qrs90dpfra7ufe7ud65npx9cnl46kcjzx0qr5lt](#)

Once this was filled out, I was then given the option to start mining, by clicking the ‘Start’ button.

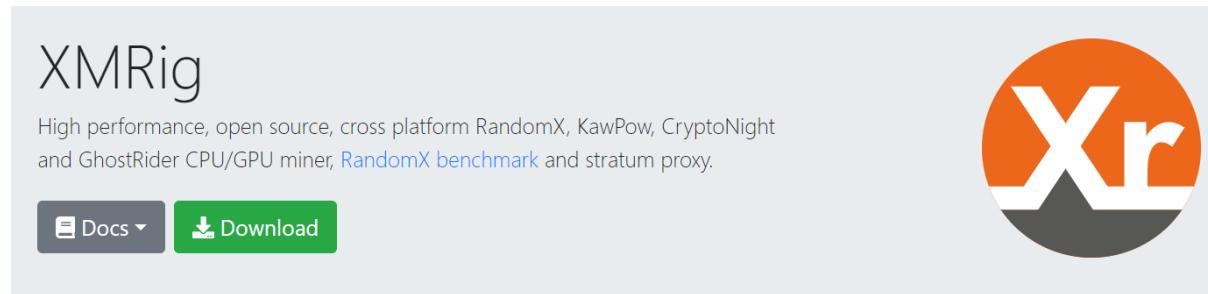
Upon clicking Start, the mining tool started up and began mining Bitcoin (BTC).



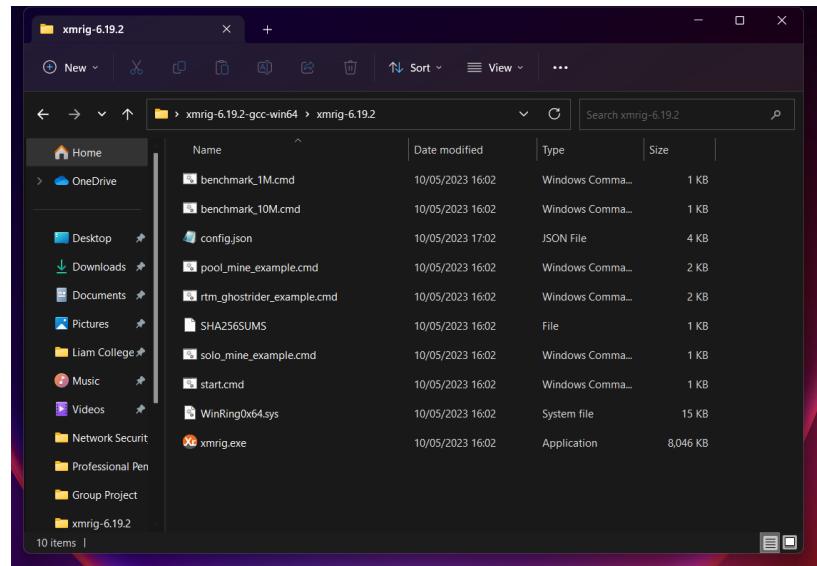
This is the crypto mining interface above. This shows the Balance of the cryptocurrency being mined, followed by the Wallet Address I chose in the previous step above. It also shows the Algorithms currently being used and the intensity of the current mining process. It also shows the Hash rate and the IP Address/Port of the user.

6.2 XM Rig 1.16.1 Setup

To install this tool, you go to the website <https://xmrig.com/> and press the download button to download the zipped XM Rig file.



Once downloaded, unzip the file, and open the folder as shown below:



Now, as XMRig is a command line based crypto mining tool, there is a bit of setup needing to be done.

First you need to create a text file, which will later be saved as a batch or .bat file within the XMRig folder. Once the text file has been created the following code needs to be typed into this text file:

```
xmrig.exe      -o      rx.unmineable.com:3333      -a      rx      -k      -u  
COIN:YOUR_ADDRESS.WORKER_NAME -p x  
pause
```

Now, this is just a template example and needs to be altered in order to mine various cryptocurrencies. For this example Bitcoin was used to set up the tool. Each time a new cryptocurrency needs to be mined; a new file has to be created along with some slight alterations.

There are three sections that need to be changed each time. These are shown highlighted in red below:

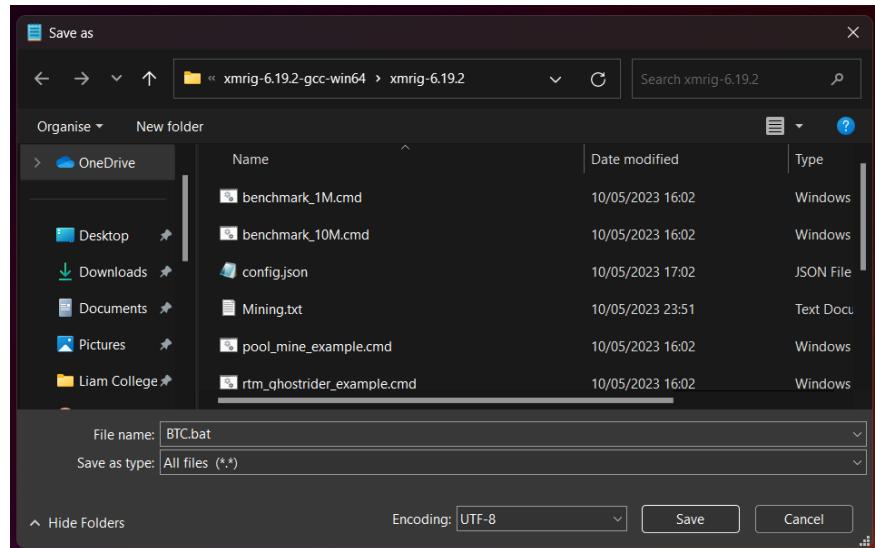
```
xmrig.exe      -o      rx.unmineable.com:3333      -a      rx      -k      -u  
COIN:YOUR_ADDRESS.WORKER_NAME -p x  
pause
```

- The first section '**COIN**' needs to be changed to whatever cryptocurrency needs to be mined.
- The second section '**YOUR_ADDRESS**' needs to be changed to the receiving address of the cryptocurrency being mined.
- The Third section '**WORKER_NAME**' can be set to anything you wish, as this is just the display name of the miner.

This is what it should look like once filled out correctly:

```
xmrig.exe -o rx.unmineable.com:3333 -a rx -k -u BTC:  
bc1qrs90dpfra7ufe7ud65npx9cnl46kcjzx0qr5lt.btcLaptop1 -p x  
pause
```

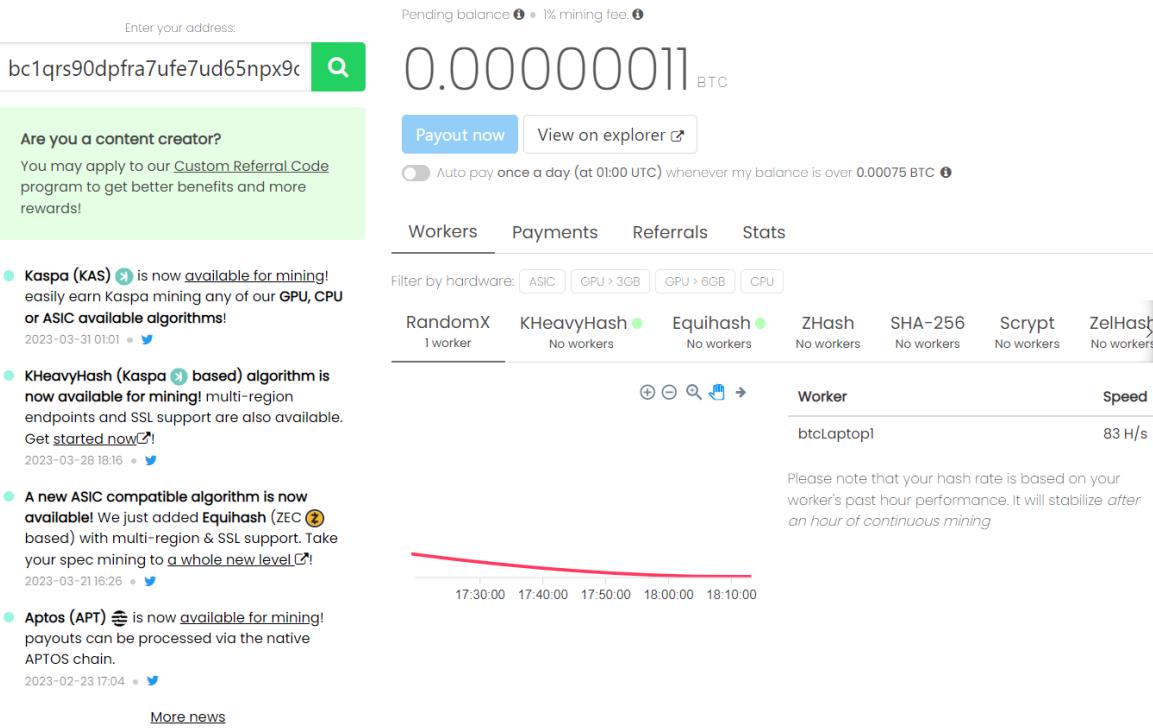
Once this step has been completed, save the text file as a batch file:



All that is needed to be done now is run the BTC.bat file and XMRig will start to mine bitcoin as shown below:

```
randomx init dataset algo rx/0 (8 threads) seed 2d4d50a4ab8aeda1...
randomx allocated 2336 MB (2080+256) huge pages 0% 0/1168 +JIT (239 ms)
randomx dataset ready (7518 ms)
cpu use profile rx (4 threads) scratchpad 2048 KB
cpu READY threads 4/4 (4) huge pages 100% 4/4 memory 8192 KB (36 ms)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884396 (5 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884397 (3 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884397 (9 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884397 (23 tx)
miner speed 10s/60s/15m 870.0 869.5 n/a H/s max 880.0 H/s
```

If you would like to view different statistics such as the amount of cryptocurrency that has been mined and/or the current hashrate, go to <https://unmineable.com/coins/> and enter your crypto address of the current coin being mined. This will bring you to a screen like the one shown below which shows the current coin mining and its hashrate:



6. How to set up Crypto Mining Rig

Now, you may be wondering what a Crypto Mining Rig is. In the simplest of terms, it is basically just a PC (Personal Computer) that is set up with the only intention of being used to mine cryptocurrency. There are two main ways of mining cryptocurrency, the first being GPU mining and the second being CPU mining. Depending on which you choose to mine crypto with, this will be the decider on how efficient your mining rig is. (Learn.ByBit, 2023)

These are things that need to be considered before building your own crypto mining rig as the profitability will depend on the hashing power of the machine you build. A GPU mining rig will be more

efficient as it is better set up to handling multiple complex calculations at one time. This means it has a high hash rate and is able to mine crypto quicker. (Learn.ByBit, 2023)

[6.1 Hash Rate](#)

Hashing or Hash rate is the measurement used in crypto mining to measure the power of your machine. Now, a blockchain network uses a hashing algorithm that generates a hash code and assigns it out into the network for miners to guess the hash value. (Jacob Wade, 2023)

The computers on the network all compete to guess the hash value and the hash rate is measured in how many guesses per second are generated by a PC. (Jacob Wade, 2023)

Hash rate is of upmost importance as it can basically show the level of security within the blockchain network. It can also help determine the difficulty of a crypto miner's reward earnings. A simple way of putting it is, the more miners competing for blocks on the network, the less chance of an attack on the network. (Jacob Wade, 2023)

[6.2 Changes in Hash Rates](#)

A hash rate is just like the rev counter inside your car, the higher the revs are on the counter, the more the engine is working to keep up. In this case the higher the hash rate, the more the computers must work to keep up. The lower the revs, the less the engine must work to keep up. (Jacob Wade, 2023)

[6.2.0.1 Hash Rate Increases](#)

This means that if the hash rate rises not only are more computational resources needed, but more electrical power is also used in the process as there are more PC's required. (Jacob Wade, 2023)

This causes the difficulty level of crypto mining to rise as the hash rate has risen, this is common in most network algorithms. (Jacob Wade, 2023)

[6.2.1 Hash Rate Decreases](#)

Once a hash rate lowers, less electrical power is used, and the network becomes less secure and more susceptible to attacks on the network. The level of difficulty in mining also declines making it easier for computers to mine and less computational power is needed. (Jacob Wade, 2023)

[6.2.2 Hash Rates of Popular Cryptocurrencies](#)

Here are the hash rates of the world's most popular cryptocurrencies to be mined:

1. Bitcoin (BTC) - 375.33M on the 11/04/2023, up 15.96% from the previous day.
2. Ethereum Classic (ETC) – 122.23 TH/s on the 11/04/2023, unchanged from previous day.
3. Litecoin (LTC) – 734.40 TH/s on the 11/04/2023, unchanged from previous day.
4. Dogecoin (DOGE) – 711.17 TH/s, unchanged from previous day.

5. Dash (DASH) – 2.76 GH/s, unchanged from previous day.

6.3 GPU Mining Benefits

A GPU, also known as a graphics processing unit, is the part inside of a personal computer with the responsibility of providing graphics for the user. The advancements in recent years in GPU technology has made even basic level GPU's mine more efficiently than CPU's. For example, a standard AMD GPU called a Radeon HD 5970 was clocked at processing speeds of 3,200 thirty-two-bit instructions per clock which calculated to be eight hundred times more than the speed of a CPU that could only complete 4 thirty-two-bit instructions.

GPUs are also preloaded with a huge number of ALU's or Arithmetic Logic Units. These units have the responsibility of performing mathematical calculations, which is part of the crypto mining process. This means that the output of the GPU is much higher as it is capable of completing more calculations.

6.4 CPU Mining Benefits

Mining cryptocurrency is more popular as it is easier to start mining using a CPU as every laptop and PC has a CPU, but only some Laptops and PC's have GPU cards as it is common for machines to have built in graphics that are incapable of GPU mining. CPU mining requires no initial investment as all that is required is a Laptop, PC (Personal Computer) or any Smartphone. It is very easy to get started with as there are a lot of tools out there offering CPU crypto mining tools.

Another advantage is that this type of mining will not consume as much electrical power in comparison to a full GPU mining rig. This is a great way for people interested in getting into crypto mining as it is achievable by pretty much anyone, even with the most basic knowledge of computing or cryptocurrency.

6.5 GPU Mining vs CPU Mining

There are several different factors that come into play when we start to take a look at comparing mining cryptocurrency with GPU's or CPU's.

The four main factors come down to:

- Energy Efficiency
- Mining Speeds
- Maintenance Requirements
- Set-Up Difficulty

Energy Efficiency

If you are looking to use minimal electrical power to start your crypto mining rig, then you would need to be looking at using a CPU based mining rig. This is the cheapest option and most common option. There are several devices that you could use, for example, Laptop, PC or Smartphone as they all contain a CPU and wouldn't use as much power as a GPU mining rig.

Mining Speeds

If you want a mining rig with incredible power that can very efficiently mine the crypto you intend to mine, then you unfortunately have to forget about energy efficiency. Using a GPU setup in your mining rig will help you mine crypto way quicker, but it will also use a serious amount of electrical power as the GPU is processing far more mathematical calculations, at a way quicker speed than a CPU mining rig ever could.

Maintenance Requirements

CPUs are a pain to maintain and must be kept under a close eye as they are not upgraded as frequently as GPUs are. This is something to keep in mind as if you are using a device like a laptop or Smartphone to mine crypto, then you must remember that these are devices that you basically would not be able to do any sort of big maintenance on as the CPUs are built into the motherboards within the device.

Set-Up Difficulty's

GPU mining is better as they don't suffer with as many heat issues due to them being able to process more calculations simultaneously whilst remaining pretty cool. On the other hand, CPUs, heat up massively as they are loaded with more tasks to complete. This is an issue as it could lead to a lot of CPU's crashing due to overheating, whereas mining with a GPU would be effortless as the GPU is much less likely to overheat and crash.

[**7. Best Performing Systems for Mining**](#)

There is also the option of buying your own custom crypto mining rigs. These are specifically set up and tuned with the only intention of being used to mine crypto. These range from about €1,000-€3,000 depending on what you are looking to get out of your mining rig.

Here are the top 5 most popular crypto mining rigs used today:

- 1. Antminer S19 Pro**

Hashpower: 110 TH/s

Algorithm: SHA-256

Avg. Price: €2,642.00

Website: [https://www.amazon.co.uk/Gen%C3%A9rico-Antminer-Bitcoin-Supply-
Bitmain/dp/B0BVW4PQL5/ref=sr_1_2?geniuslink=true&keywords=bitcoin+miner+supplier+new+asic+bitcoin+antminer+s19+pro+110th+s+3250w&sr=8-2](https://www.amazon.co.uk/Gen%C3%A9rico-Antminer-Bitcoin-Supply-Bitmain/dp/B0BVW4PQL5/ref=sr_1_2?geniuslink=true&keywords=bitcoin+miner+supplier+new+asic+bitcoin+antminer+s19+pro+110th+s+3250w&sr=8-2)

2. AvalonMiner A1166 Pro

Hashpower: 81 TH/s

Algorithm: SHA-256

Avg. Price: €650.00

Website: [https://shop.canaan.io/products/sth-avalon-miner-a1166-pro-81t-
3400w?VariantsId=10058](https://shop.canaan.io/products/sth-avalon-miner-a1166-pro-81t-3400w?VariantsId=10058)

3. AvalonMiner 1246

Hashpower: 90 TH/s

Algorithm: SHA-256

Avg. Price: €1,050.00

Website: [https://shop.canaan.io/products/sth-avalon-miner-a1246-96t-
3420w?VariantsId=10056](https://shop.canaan.io/products/sth-avalon-miner-a1246-96t-3420w?VariantsId=10056)

4. WhatsMiner M30S++

Hashpower: 112 TH/s

Algorithm: SHA-256

Avg. Price: €2,500.00

Website: <https://www.whatsminer.com/>

5. WhatsMiner M32-62T

Hashpower: 62 TH/s

Algorithm: SHA-256

Avg. Price: €1,000.00

Website: <https://www.whatsminer.com/>

These are the top 5 crypto mining rigs available today, their hashrates range from 81 TH/s to 112 TH/s depending on the client's budget and how much crypto they plan on mining using the rigs.

8. Testing cryptocurrencies, tools, and Systems.

Before starting any of these tests with our systems, we decided to go ahead and create a small piece of code that was created in the Python coding language. The code displays a small GUI when it is executed, and it shows what components you got within your system (GPU & CPU). This was as it can be difficult for others to find out information about their systems so all they do is run it and it will display it to them.

```

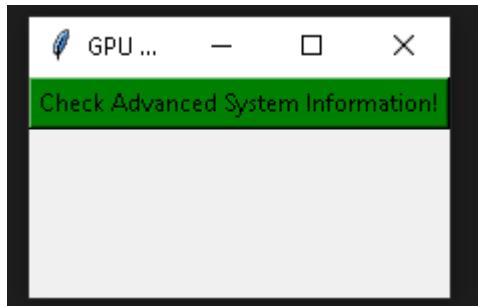
1 import wmi #implementeed WMI (Windows Management Instrumentation)
2 import tkinter as tk #added tkinter, also known as the python GUI
3 from tkinter import *
4 import platform #added platform to see the specs contained in a system
5
6 def cpu(): #function created
7     c = wmi.WMI() #calling the WMI class
8     cpu = c.Win32_Processor() @) #retrieve processor from system
9     return cpu.Name.strip() #return the CPU model name
10
11 def ram(): #function created
12     c = wmi.WMI() #calling the WMI class
13     total_ram = 0 #set variable to 0
14     for RAM in c.Win32_PhysicalMemory(): #captures any memory that WMI finds
15         total_ram += int(RAM.Capacity) #converts string result into a integer
16     return total_ram / (1024 ** 3) #the total ram gets divided by 1024 to the power of 3 (converts from byte to gigabyte)
17
18 def system(): #function created
19     system_info = [] #created an empty list
20     system_info.append(f"System: {platform.system()}") #takes the name of the operating system
21     return system_info #returns info as the output
22
23 def gpu(): #declared a function named action1
24     c = wmi.WMI() #calling the WMI class
25     found = False #set the flag to false
26     for GPU in c.Win32_VideoController(): #created a for loop named "GPU"
27         if 'AMD' in GPU.Name: #if there is a videocontroller named "AMD"
28             result_label.config(text=f'AMD GPU Name: {GPU.Name}') #return to me the present GPU within the system
29             found = True #set the flag to true
30             break #stop
31     if not found: #if the specific GPU is not detected then return this
32         result_label.config(text='No AMD GPU found.', bg="green") #this returns when not detected "AMD"
33
34     cpu_model = cpu() #retrieves the CPU model name
35     result_label_cpu.config(text=f'CPU Model: {cpu_model}') #how the result should be displayed
36
37     for GPU in c.Win32_VideoController(): #created a for loop named "GPU"
38         if 'NVIDIA' in GPU.Name: #if there is a videocontroller name "NVIDIA"
39             result_label.config(text=f'NVIDIA GPU Name: {GPU.Name}') #return to me the present GPU within the system
40             found = True #set the flag to true
41             break #stop
42     if not found: #if the NVIDIA GPU isn't found
43         result_label.config(text='No NVIDIA GPU found.') #return me this text so it shows that it isn't detected.
44
45     cpu_model = cpu() #retrieves the CPU model name
46     result_label_cpu.config(text=f'CPU Model: {cpu_model}') #how the result should be displayed
47
48     total_ram = ram() #returns the system RAM
49     result_label_ram.config(text=f'Total RAM: {total_ram:.2f} GB') #displays the value of the variable
50
51     system_info = system() #function retrieves the information
52     result_label_system.config(text="\n".join(system_info)) #creates a string of the retrieved system info from that function
53
54 root = tk.Tk() #created a tk gui window to display when the code is executed
55
56 root.title("GPU Detector") #added a title to the GUI
57
58 amd_button = tk.Button(root, text="Check Advanced System Information!", command=gpu, bg="green") #added a button for the AMD section
59 amd_button.pack() #added the button to the group
60
61 result_label = tk.Label(root, text="") #added a empty string so it displays the active GPU within the system
62 result_label.pack() #added the text to the group
63
64 result_label_cpu = tk.Label(root, text="") #added a empty string so it displays the active CPU within the system
65 result_label_cpu.pack() #added the text to the group
66
67 result_label_ram = tk.Label(root, text="") #added a empty string so it displays the RAM that is within the system
68 result_label_ram.pack() #added the text to the group
69
70 result_label_system = tk.Label(root, text="") #added an empty string so it displays the RAM that is within the system
71 result_label_system.pack() #added the text to the group
72 root.mainloop() #displays the GUI continuously since it's looped.

```

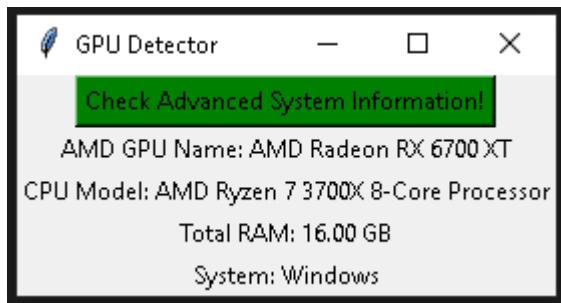
Figure 13 Python Code Created for Detecting GPU and CPU Information

While using the websites <http://timgolden.me.uk/python/wmi/cookbook.html> and <https://docs.python.org/3/library/tkinter.html> and <https://learn.microsoft.com/en-us/windows/win32/cimwin32prov/win32-videocontroller> it helped us create this code as it showed what methods to use in order to grab information from the system.

Here is an example of how the GUI displays when the code is being executed:



After the button is click it will display what components you have installed inside of your system.



In order for us making a start on this test, we had to be certain that we were able to have our hands on these devices at all times and use them at all times when it was need. Before making a start on this test, we took three devices of our own and noted down all the specifications within the selected systems. It was mandatory that each system was different in performance as these tests would have turned out extremely similar if that was the case. Notes were taken on the specifications such as, CPU speed, clock frequency, RAM speed, how much memory the system had, GPU performance + speed.

System 1-3	Liam McDonnell B00135910
System 4-6	Abel Melinte B00137882
System 7-9	Najeeb Rahman B00097537

8.1 Result while mining with unMineable

8.1.1 System 1 Bitcoin unMineable

System 1	HP Laptop 15s-fq1xxx
CPU	Intel i7 - 1065G7 CPU @ 1.30GHz
RAM	8GB SODIMM

Analysis of System Performances

during Crypto Mining

GPU	Intel Iris Plus Graphics
INTERNET	GIGABIT

The first crypto mining tool that was used for this device was unMineable Miner.

Here is the first device mining Bitcoin (BTC) using the unMineable Mining tool:

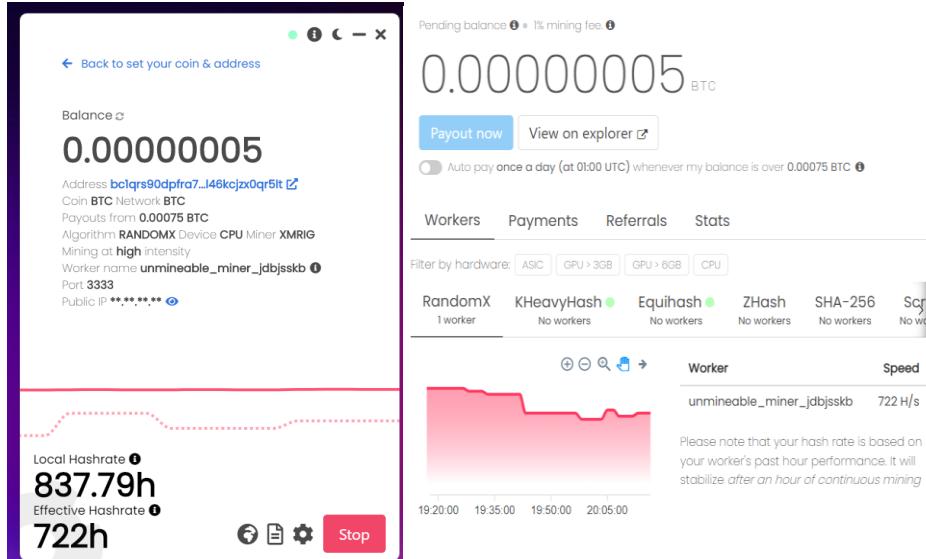


Figure 14 System 1 Bitcoin Result

This was the result of Bitcoin (BTC) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00000000 and after the mining session it had rose to 0.00000005. We can see the effective hash rate during this hour was 722H/s.

8.1.2 System 1 Ethereum unMineable

The first crypto mining tool that was used for this device was unMineable Miner.

Here is the first device mining Ethereum (ETH) using the unMineable Mining tool:

Analysis of System Performances

during Crypto Mining

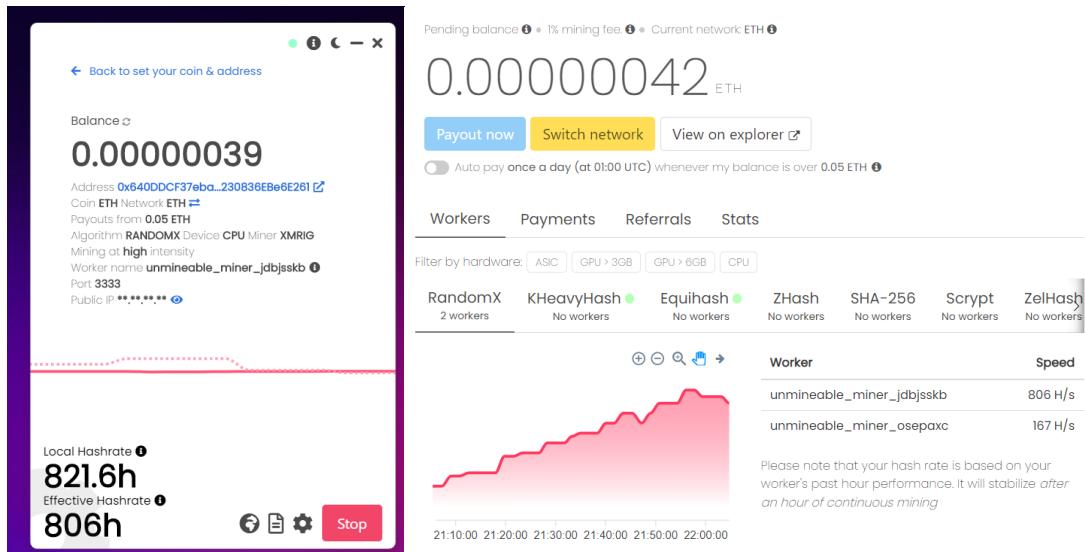


Figure 15 System 1 Ethereum Result

This was the result of Ethereum (ETC) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00000000 and after the mining session it had rose to 0.00000039. Once the tool was stopped, it then rose to 0.00000042. This shows that there was a slight delay in the tool hence why it displayed two different amounts. We can also see that the effective hash rate during this hour was 806H/s.

8.1.3 System 1 Litecoin unMineable

The first crypto mining tool that was used for this device was unMineable Miner.

Here is the first device mining Litecoin (LTC) using the unMineable Mining tool:

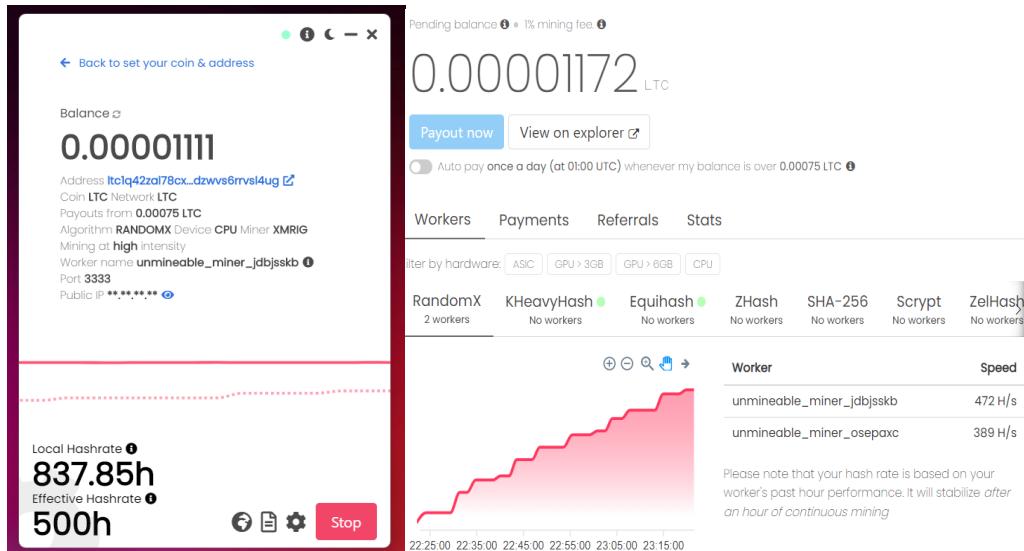


Figure 16 System 1 Litecoin Result

This was the result of Litecoin (LTC) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00000000 and after the mining session it had rose to 0.00001111. Once the tool was stopped, it then rose to 0.00001172. This again shows that there was a slight delay in the tool hence why it displayed two different amounts. We can see that the effective hash rate during this hour was 500H/s.

8.1.4 System 1 ZCash unMineable

The first crypto mining tool that was used for this device was unMineable Miner.

Here is the first device mining ZCash (ZEC) using the unMineable Mining tool:

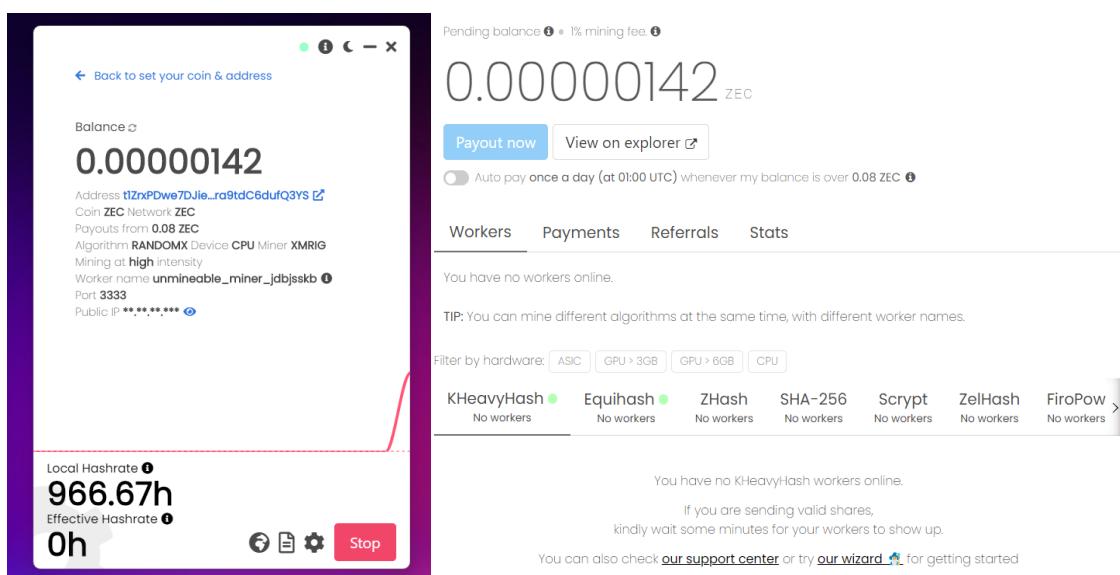


Figure 17 System 1 ZCash Result

This was the result of ZCash (ZEC) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00000000 and after the mining session it had rose to 0.00000142. We can see the effective hash rate during this hour was 940H/s.

8.1.5 System 1 Dash unMineable

The first crypto mining tool that was used for this device was unMineable Miner.

Here is the first device mining Dash (DASH) using the unMineable Mining tool:

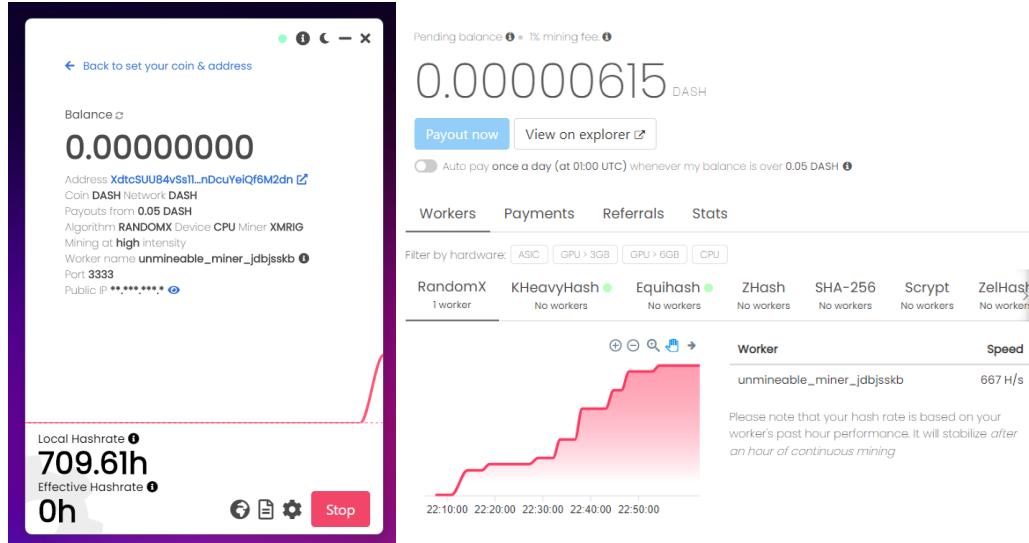


Figure 18 System 1 Dash Result

This was the result of Dash (DASH) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00000000 and after the mining session it had rose to 0.00000615. We can see the effective hash rate during this hour was 667H/s.

8.1.6 System 2 Bitcoin unMineable

System 2	Packard Bell EasyNote TE69KB
CPU	AMD A4-5000 APU 1,500Mhz
RAM	8GB DDR3
GPU	AMD Radeon HD 8330
INTERNET	GIGABIT

The first crypto mining tool that was used for this device was unMineable Miner.

Here is the first device mining Bitcoin (BTC) using the unMineable Mining tool:

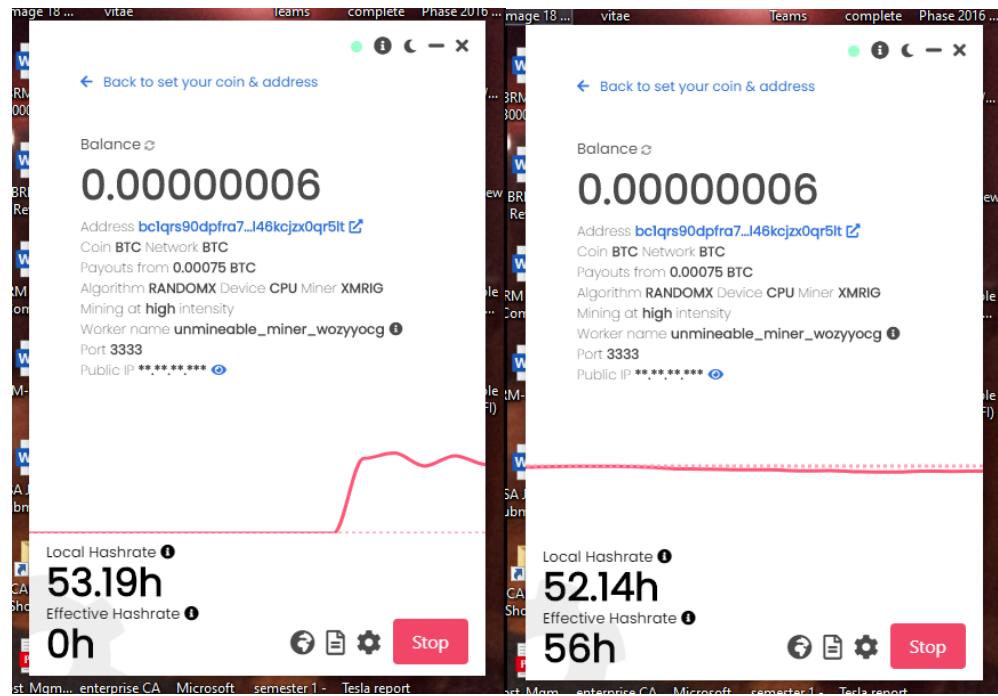


Figure 19 System 2 Bitcoin Result

This was the result of Bitcoin (BTC) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00000006 and after the mining session it had not changed and remained at 0.00000006. We can see the effective hash rate during this hour was very low at 56H/s.

8.1.6 System 2 Ethereum unMineable

The first crypto mining tool that was used for this device was unMineable Miner.

Here is the first device mining Ethereum (ETH) using the unMineable Mining tool:

Analysis of System Performances

during Crypto Mining

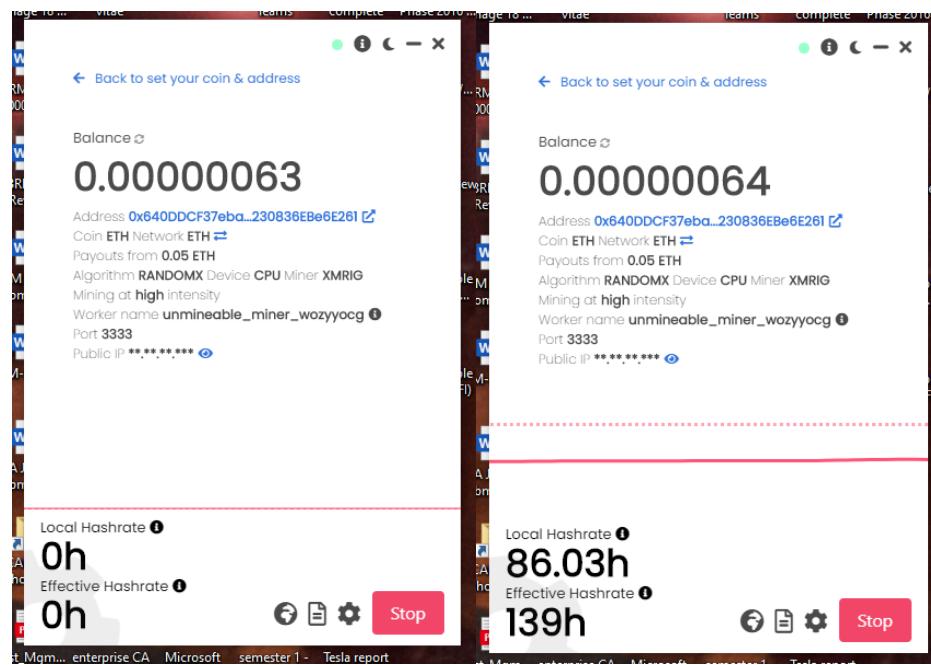


Figure 20 System 2 Ethereum Result

This was the result of Ethereum (ETH) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00000063 and after the mining session it had risen slightly to the amount of 0.00000064. We can see the effective hash rate during this hour was at 139H/s.

8.1.7 System 2 Litecoin unMineable

The first crypto mining tool that was used for this device was unMineable Miner.

Here is the first device mining Litecoin (LTC) using the unMineable Mining tool:

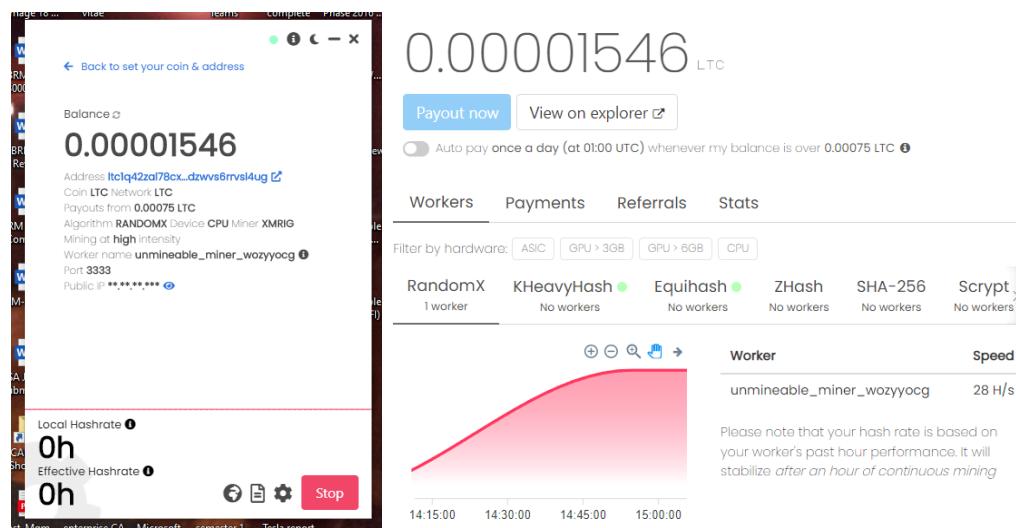


Figure 21 System 2 Litecoin Result

This was the result of Litecoin (LTC) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00001546 and after the mining session it had no change at all, staying at 0.00001546. We can see the effective hash rate during this hour was very low at 28H/s.

8.1.8 System 2 ZCash unMineable

The first crypto mining tool that was used for this device was unMineable Miner.

Here is the first device mining ZCash (ZEC) using the unMineable Mining tool:

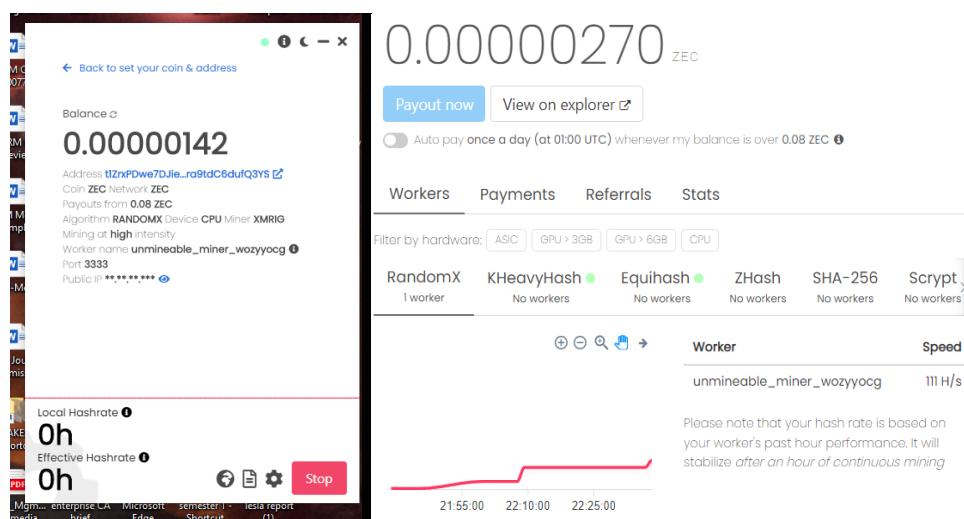


Figure 22 System 2 ZCash Result

This was the result of ZCash (ZEC) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00000142 and after the mining session it had risen to the amount of 0.00000270. We can see the effective hash rate during this hour was 111H/s.

8.2.0 System 2 Dash unMineable

The first crypto mining tool that was used for this device was unMineable Miner.

Here is the first device mining Dash (DASH) using the unMineable Mining tool:

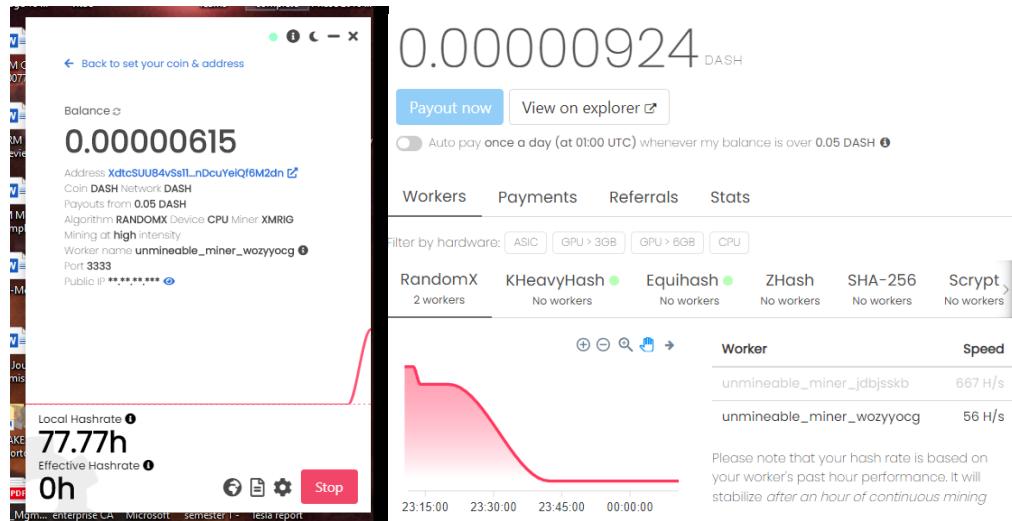


Figure 23 System 4 Dash Result

This was the result of Dash (DASH) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00000615 and after the mining session it had risen to the amount of 0.00000924. We can see the effective hash rate during this hour was low at 56H/s.

8.2.1 System 3 Bitcoin unMineable

System 3	HP Beats 15 Notebook PC
CPU	AMD A8-5545M APU 1,700Mhz
RAM	16.0GB DDR3
GPU	Radeon(tm) HD Graphics
INTERNET	GIGABIT

The first crypto mining tool that was used for this device was unMineable Miner.

Here is the first device mining Bitcoin (BTC) using the unMineable Mining tool:

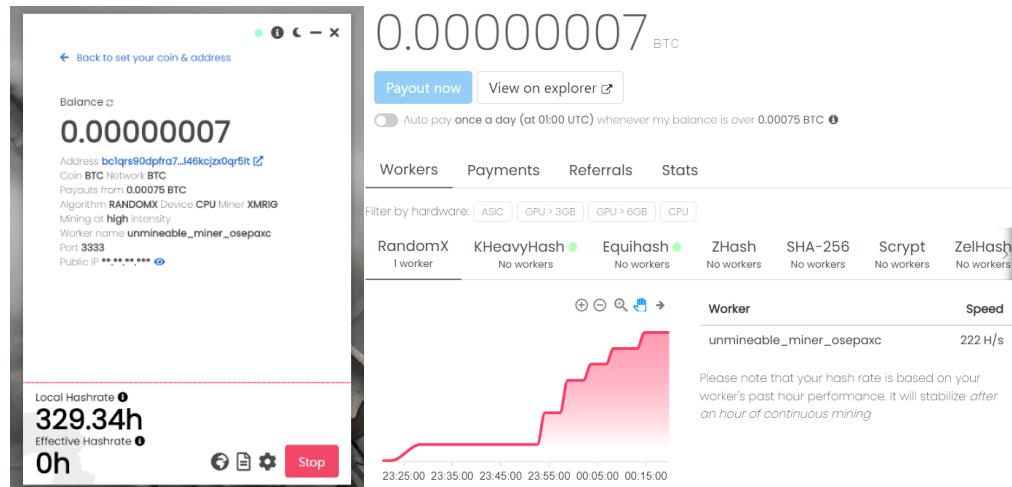


Figure 24 System 3 Bitcoin Result

This was the result of Bitcoin (BTC) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was up to 0.00000007 from the previous machine and after the mining session it had not changed and remained at 0.00000007. We can see the effective hash rate during this hour was 222H/s.

8.2.2 System 3 Ethereum unMineable

The first crypto mining tool that was used for this device was unMineable Miner.

Here is the first device mining Ethereum (ETH) using the unMineable Mining tool:

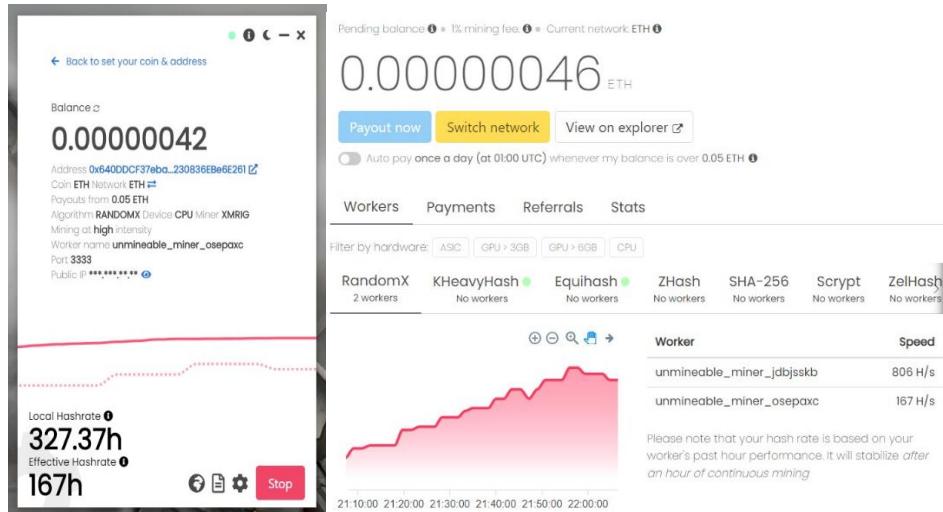


Figure 25 System 3 Ethereum Result

This was the result of Ethereum (ETH) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00000042 and after the mining session it had increased to 0.00000046. We can see the effective hash rate during this hour was 167H/s.

8.2.3 System 3 Litecoin unMineable

The first crypto mining tool that was used for this device was unMineable Miner.

Here is the first device mining Litecoin (LTC) using the unMineable Mining tool:

Analysis of System Performances

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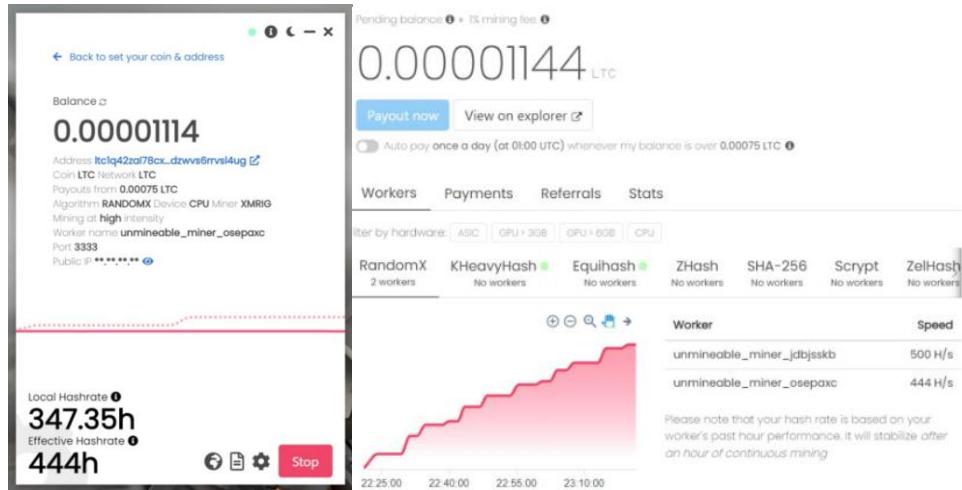


Figure 26 System 3 Litecoin Result

This was the result of Litecoin (LTC) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00001114 and after the mining session it had increased to 0.00001144. We can see the effective hash rate during this hour was 444H/s.

8.2.4 System 3 ZCash unMineable

The first crypto mining tool that was used for this device was unMineable Miner.

Here is the first device mining ZCash (ZEC) using the unMineable Mining tool:

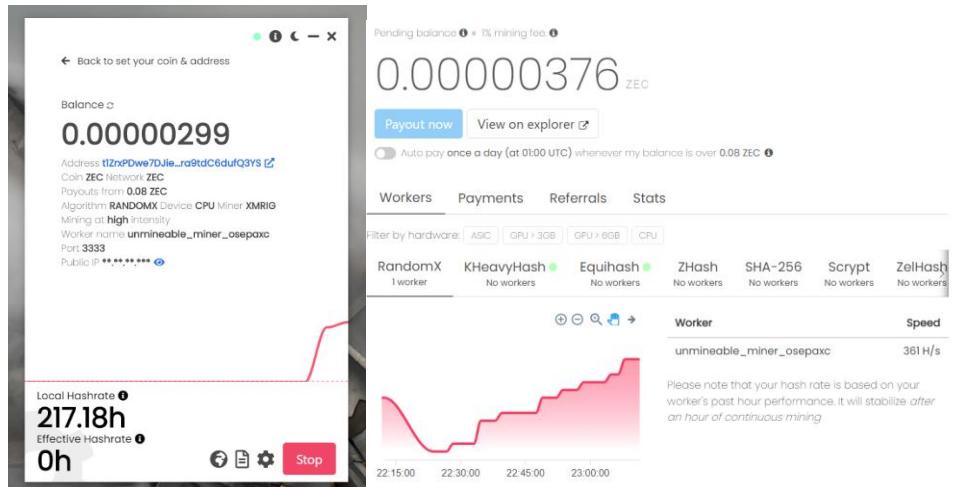


Figure 27 System 3 ZCash Result

This was the result of ZCash (ZEC) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00000299 and after the mining session it had increased to 0.00000376. We can see the effective hash rate during this hour was 361H/s.

8.2.5 System 3 Dash unMineable

The first crypto mining tool that was used for this device was unMineable Miner.

Here is the first device mining Dash (DASH) using the unMineable Mining tool:

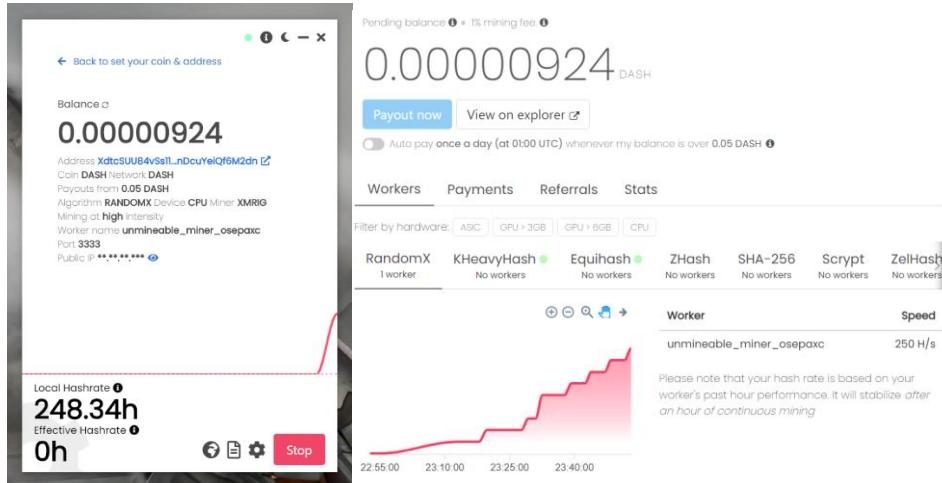


Figure 28 System 3 Dash Result

This was the result of Dash (DASH) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00000924 and after the mining session it had not changed and remained at 0.00000924. We can see the effective hash rate during this hour was 250H/s.

8.2.6 System 4 Ethereum unMineable

System 4	Custom Built PC (DESKTOP-17ILC2K)
CPU	AMD Ryzen 7 3700X 8 Cores, 3600Mhz, 16 Processors
RAM	16GB 3200Mhz DDR4
GPU	AMD Radeon™ RX 6700 XT Graphics Card
Broadband	Gigabyte Ethernet LAN (1000MB/s)
Power Supply	Corsair RM850x (850Watts)

System 4 is the highest end system compared to the other systems within this procedure. Here will display on how well the system performed compared to a lower end system.

Here are the results on how System 4 performed while mining Ethereum.

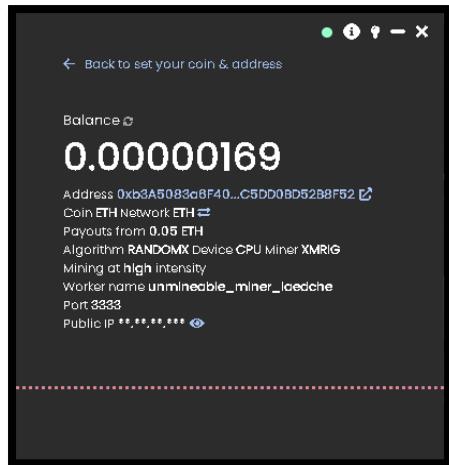


Figure 29 System 4 Ethereum Result

While leaving the system running for exactly “One” hour, we can see how it performed and it gave an accurate result. We can see that it has mined 0.00000169 ETH.

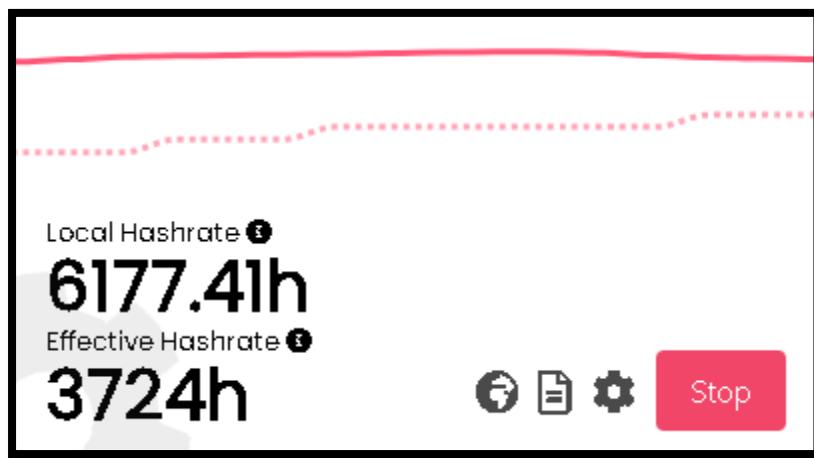


Figure 30 System 4 Ethereum Hash rate

This image shows that System 4 was able to mine up to a hash rate of 6177.41h, unfortunately it was only mining at a rate of 3724 hash rates.

```
cpu      accepted (84/0) diff 100001 (15 ms)
net      new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2879227 (94 tx)
miner    speed 10s/60s/15m 7342.5 7039.3 5734.9 H/s max 7356.2 H/s
```

Figure 31 System 4 Ethereum Max Hash

In this image it shows the logs of the current mining process, we can see at “CPU” it shows that the CPU has been accepted and will be used and “Miner” it shows the speed on how the CPU performed.

- The mining rate, expressed in hashes per second (H/s), for each of the above-mentioned time periods is " 6329.8 5780.6 5610.3 H/s". This highlights that in the first ten seconds the mining hash rate was at 6329.8, at sixty seconds it was at 5780.6 and finally after fifteen minutes the hash rate was at 5610.3.
- The phrase "max 6624.9 H/s" refers to the highest mining speed the rig or program was able to accomplish during the measurement periods. This indicates that at some point during the mining process, the hardware or software can mine at a maximum speed of 6624.9 H/s.

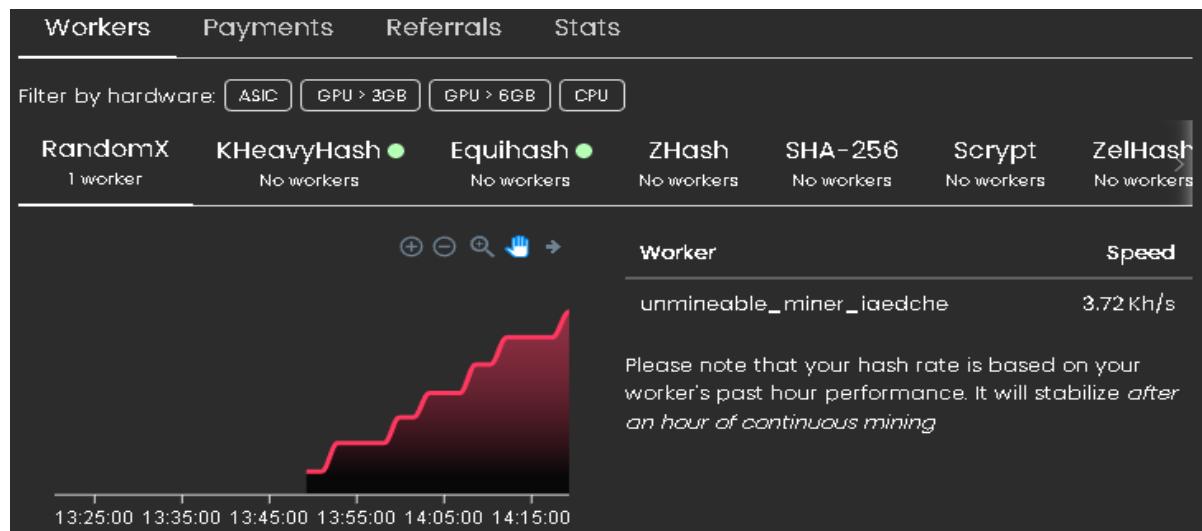


Figure 32 System 4 Ethereum Graph

In this image it displays the speed in which the CPU was mining at, the CPU was mining at (3.72Kh/s = 3720 hashes per second)

8.2.7 System 4 Bitcoin unMineable

In this section it will display how System 4 performed when it came to mining Bitcoin crypto.

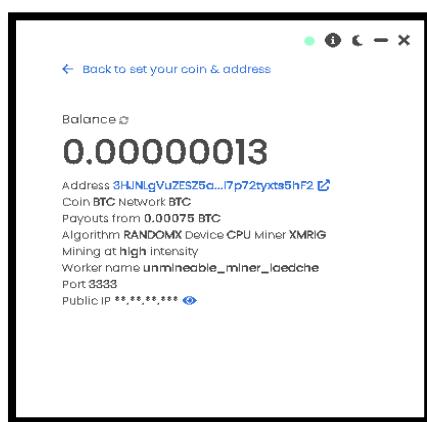


Figure 33 System 4 Bitcoin Result

It is evident that the system had the capability to mine only a small amount of Bitcoin, while other crypto miners focused on Bitcoin and disregarded the remaining cryptocurrencies.

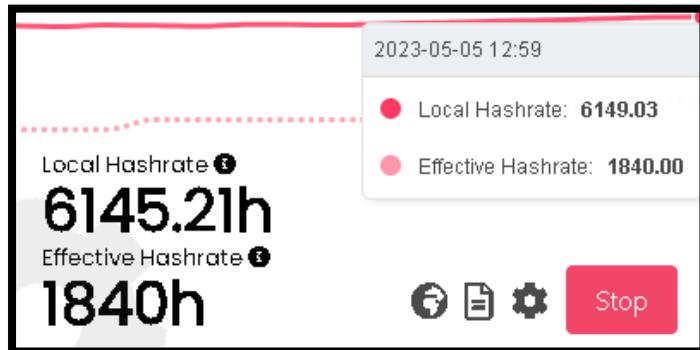


Figure 34 System 4 Bitcoin Hash Speeds

This image highlights on how much hash rate the system was getting while mining Bitcoin. Unfortunately, the system can go up to over 6 thousand in hash rate but out of that only 1840h is able to be used as it is Bitcoin, and it is being mined by every miner every day.

```
cpu      accepted (55/0) diff 100001 (15 ms)
miner    speed 10s/60s/15m 6574.5 6584.5 5763.3 H/s max 6628.0 H/s
```

Figure 35 System 4 Bitcoin Max Hash rate

In this image it shows the logs of the mining, on the line label "CPU" it shows that the CPU which is being used has been accepted and in the next line it shows the performance of the CPU.

- The mining rate, expressed in hashes per second (H/s), for each of the above-mentioned time periods is "6574.5 6584.5 5763.3 H/s". This highlights that in the first ten seconds the mining hash rate was at 6574.5, at sixty seconds it was at 6584.5 and finally after fifteen minutes the hash rate was at 5763.3.
- The phrase "max 6628.0 H/s" refers to the highest mining speed the rig or program was able to accomplish during the measurement periods. This indicates that at some point during the mining process, the hardware or software can mine at a maximum speed of 6628.0 H/s.



Figure 36 System 4 Bitcoin Graph

In this image it shows how fast the system is mining the crypto ($2.67\text{Kh/s} = 2670$ Hashes per second)

8.2.8 System 4 ZCash unMineable

In this portion of the procedure will be displayed on how the systems worked when it started mining ZCash.

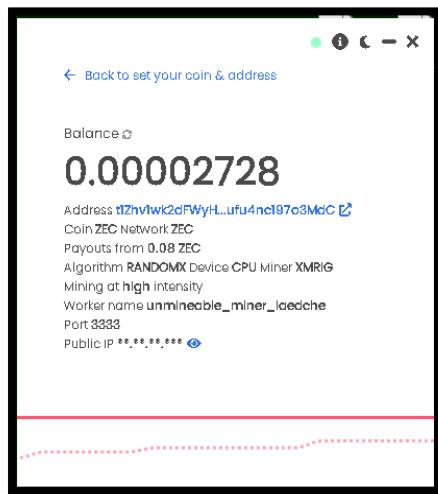


Figure 37 System 4 ZCash Result

Here we can see that it mined much more crypto compared to the others, the mine began when there was already “0.00000588” ZCash mine, this is because the test has been completed first on the other devices before System 4. Overall, it calculates and adds that “0.00002140” ZCash has been mined.

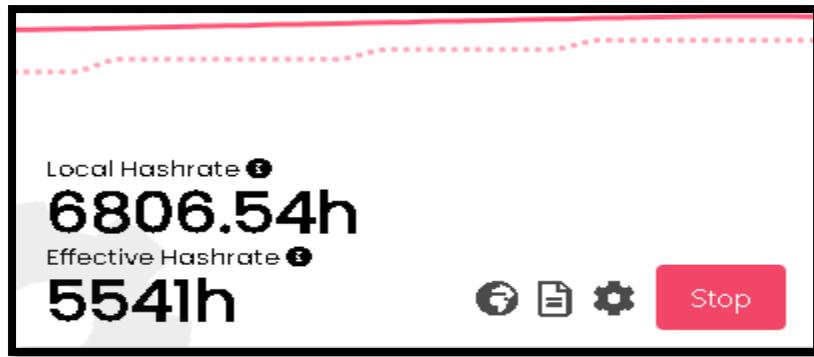


Figure 38 System 4 ZCash Hash rate

Here is an image of the hash rate while System 4 is mining ZCash. It can receive up to 6806.54 hash rates but unfortunately it ZCash can not go anymore than 5541 hash rates.

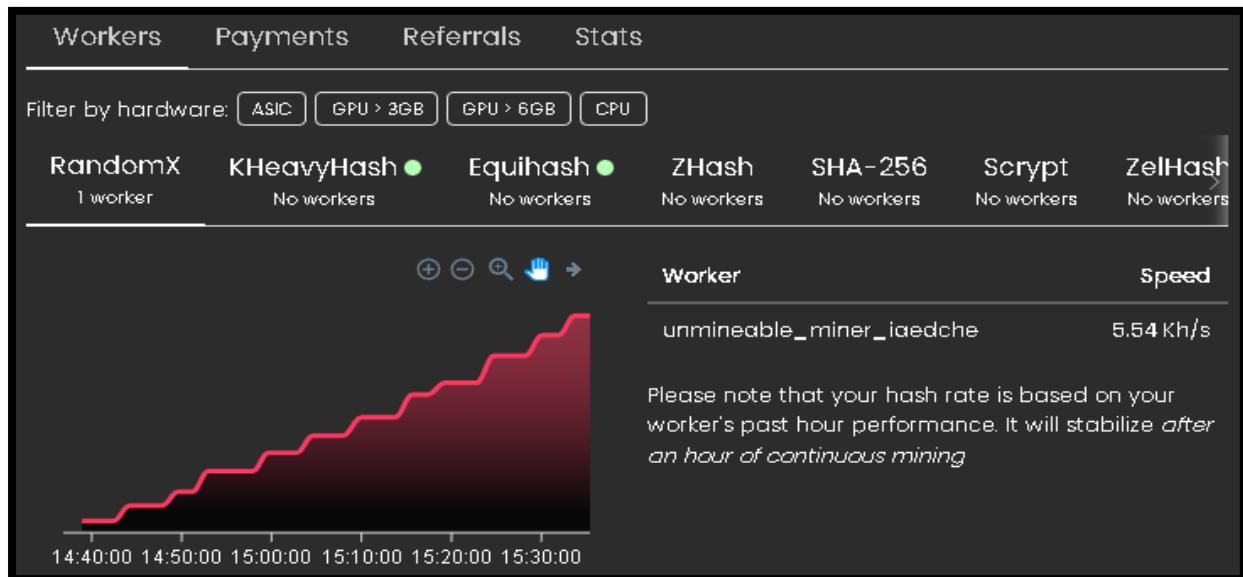


Figure 39 System 4 Bitcoin Graph

In this image it displays us a small graph of the performance and also on the right it shows the speed which System 4 can reach up to while mining ZCash ($5.54 \text{ Kh/s} = 5540 \text{ hash rate}$).

8.2.9 System 4 Litecoin unMineable

In this section, it will display how System 4 performed while mining Litecoin LTC at a high configured setting.

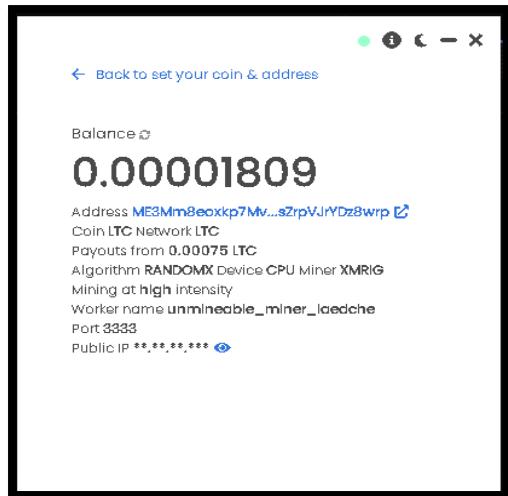


Figure 40 System 4 Litecoin Result

In this image it shows how much System 4 was able to mine Litecoin within the space of “one” hour. It has mine up to 0.0000509 Litecoin overall. In the image displayed it shows that 0.00001809 Litecoin was mined but that was because System 5 and 6 was tested before System 4 was tested and it was just additional onto the coins previously mined.

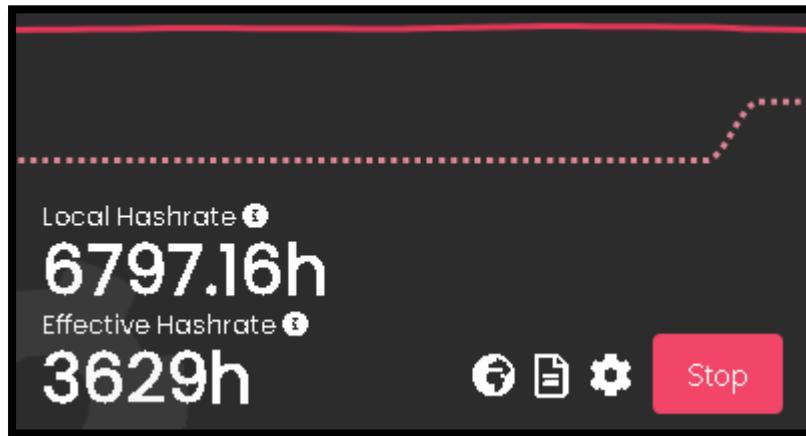


Figure 41 System 4 Litecoin Hash rate

It shows that System 4 had the power of being capable of mining up to a speed of 6797.16H/s (Hash rates). Unfortunately, only a hash rate of 3629H/s was being used, this could have caused it due to the fact of what encryption algorithm is being used or even the pool traffic within the coin.

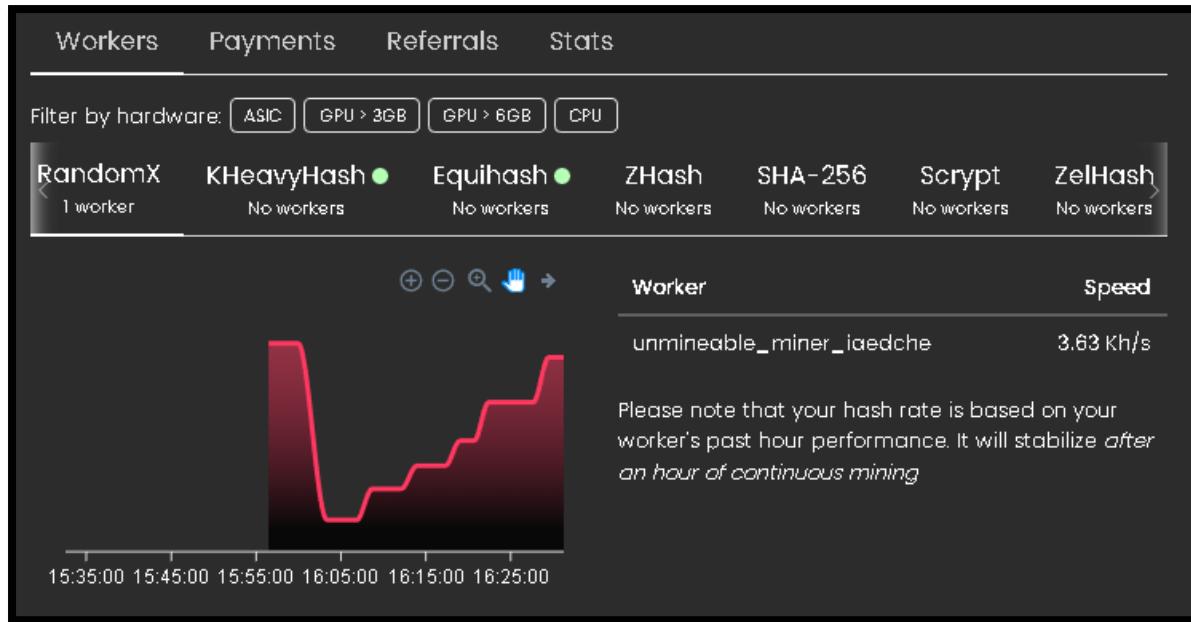


Figure 42 System 4 Litecoin Graph

This is a display related to the speed at which the System was mining at. It shows that it was mining at a speed of (3.63 Kh/s = 3630 hash rate).

8.2.8 System 4 Dash unMineable

In the portion, it will display on how System 4 has performed through the mining procedure of Dash coin.

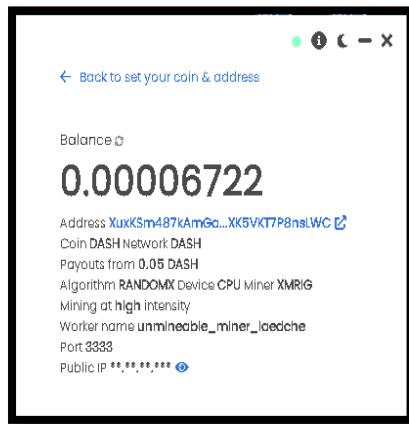


Figure 43 System 4 Dash Result

While System 4 was mining away on Dash coin its game to end, and it was able to mine “0.00005901” Dash. It displays 0.00006722 as that included all three tests, System 5, 6 and 4.

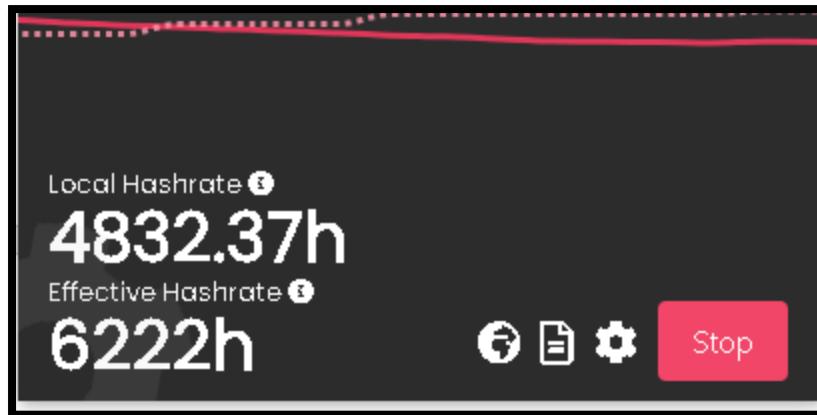


Figure 44 System 4 Dash Hash Rate

This mining test was a little different, it shows that the local hash rate is lower than the effective hash rate while it was mining DASH coin. This happened because of the Network Latency between my System and the original pool area of Dash, this means that it was at a low difficulty which resulted in being having more shares being submitted.

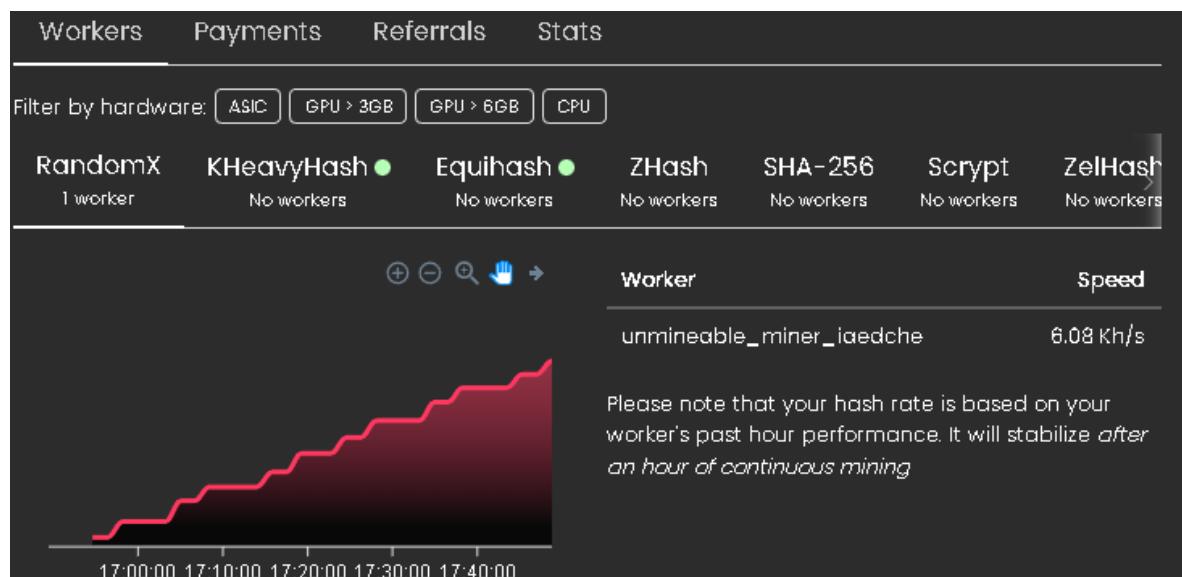


Figure 45 System 4 Dash Graph

Here it displays the speed in which System 4 was mining Dash coin at. It shows that it was able to mine at a speed of (6.08 Kh/s = 6080 Hash rate).

System 5	Asus ROG Strix G15 G513IH-HN036T
CPU	AMD Ryzen 5 4600H
RAM	8GB DDR4 3200MHz SDRAM (2 x 4GB)
GPU	NVIDIA GeForce GTX 1650Ti 4GB GDDR6 VRAM
Broadband	Gigabyte Ethernet LAN (1000MB/s)
Power Supply	200W AC Adapter

System 5 is one of the 4 laptops we have used throughout our testing on crypto mining. Below will be displayed on how well the system has performed with the mid-specs.

8.2.9 System 5 Bitcoin unMineable

Here shows on how System 5 performed while mining BTC for one hour to get an accurate result overall.

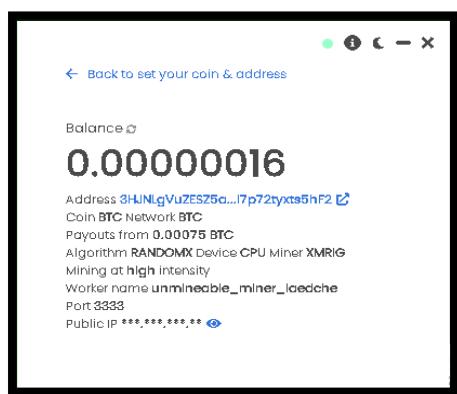


Figure 46 System 5 Bitcoin Result

In the image above it displays that the system was able to mine “0.00000003” BTC. It displays 0.00000016 as it continued to mine from the finishing result of System 4.

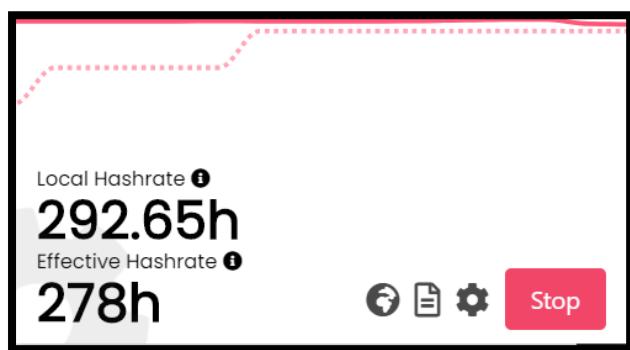


Figure 47 System 5 Bitcoin Hash Rate

It shows the System 5 was able to mine at a hash rate of “278H/s” which is quite powerful for a mid-spec laptop. It was also able to mine very close to the local hash rate number, this means that the pool traffic of the specific coin was not as busy at the time of the test.

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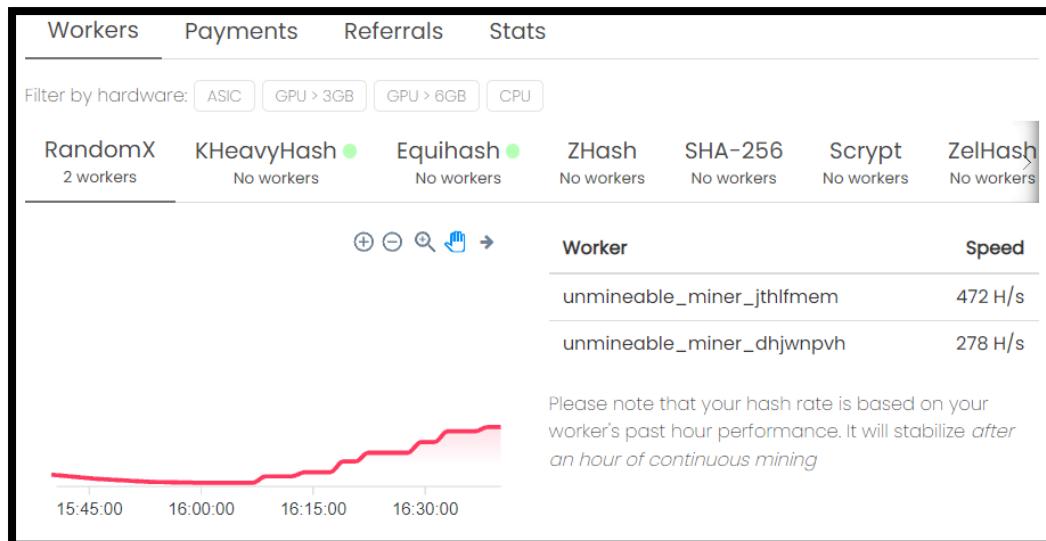


Figure 48 System 5 Bitcoin Graph

Here is a small graph showing how the mining procedure was going on while using System 5. For a laptop it shows the H/s instead of Kh/s so it is easier to understand what speed it was mining at. In this image System 5 is labelled as “unmineable_miner_dhjwnpvh”.

8.3.0 System 5 Ethereum unMineable

Here shows the result on how System 5 performed when it was mining Ethereum for one hour to get an accurate result.

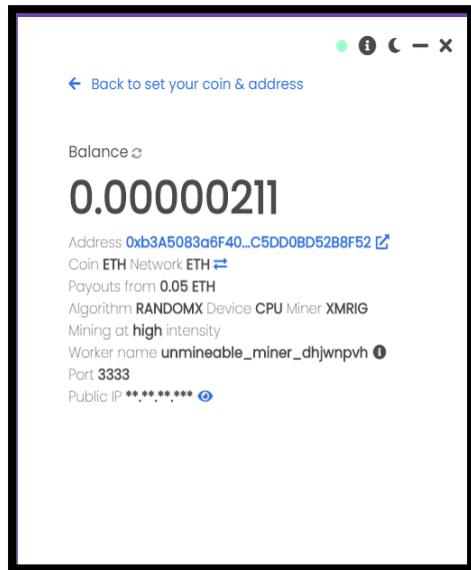


Figure 49 System 5 Ethereum Result

System 5 was able to mine up to “0.00000042 ETH” within the space of one hour. It displays “0.00000211” as it continues from the mining test for System 4.



Figure 50 System 5 Ethereum Result

System 5 was able to each up to a hash rate of “306 H/s”, we can see that the effective hash rate is half the amount that local hash rate is sitting at. This can happen if the traffic of Ethereum is busy, and many miners are mining all at once.

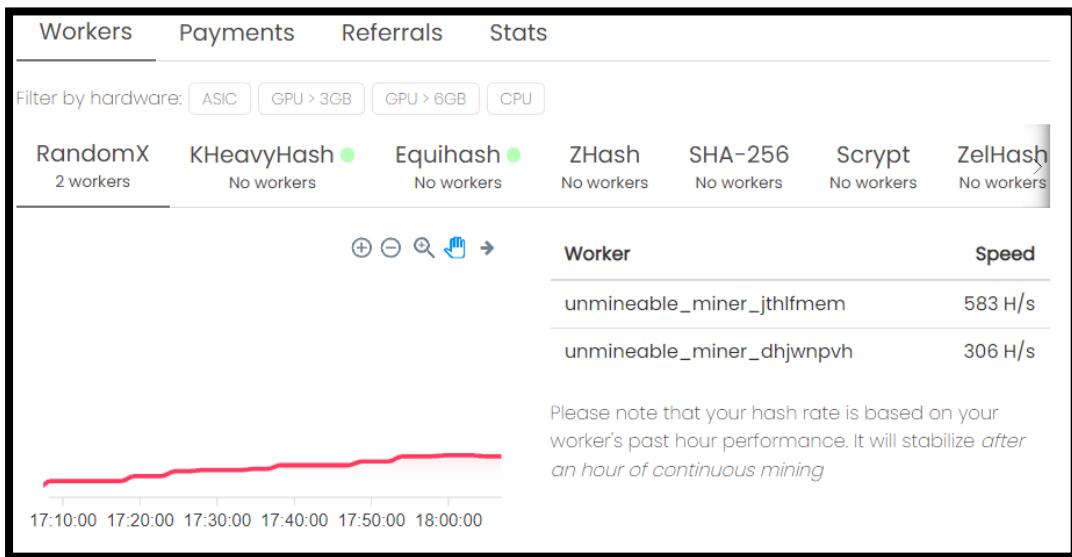


Figure 51 System 5 Ethereum Graph

Here is a small graph that displays the result on how well System 5 done while mining Ethereum. System5 is labelled as “unmineable_miner_dhjwnpvh” in this specific image above.

8.3.1 System 5 Dash unMineable

After Ethereum was mined for one hour, System 5 was then set to mine Dash coin for one hour.

Analysis of System Performances

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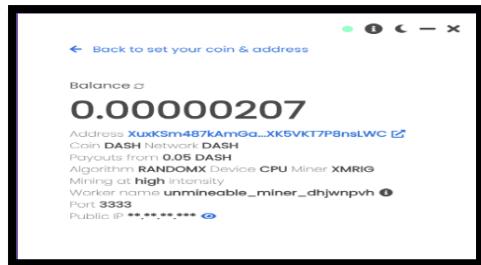


Figure 52 System 5 Dash Result

System 5 had to power to mine up to “0.00000207 DASH” within the time of one hour.



Figure 53 System 5 Dash Hash Rate

Through this test, System 5 was able to reach up to a hash rate of “222 H/s”. The effective hash rate is the only hash rate that matters. It is unfortunate that it is lower than the local, but this causes this to happen cause of the pool traffic.

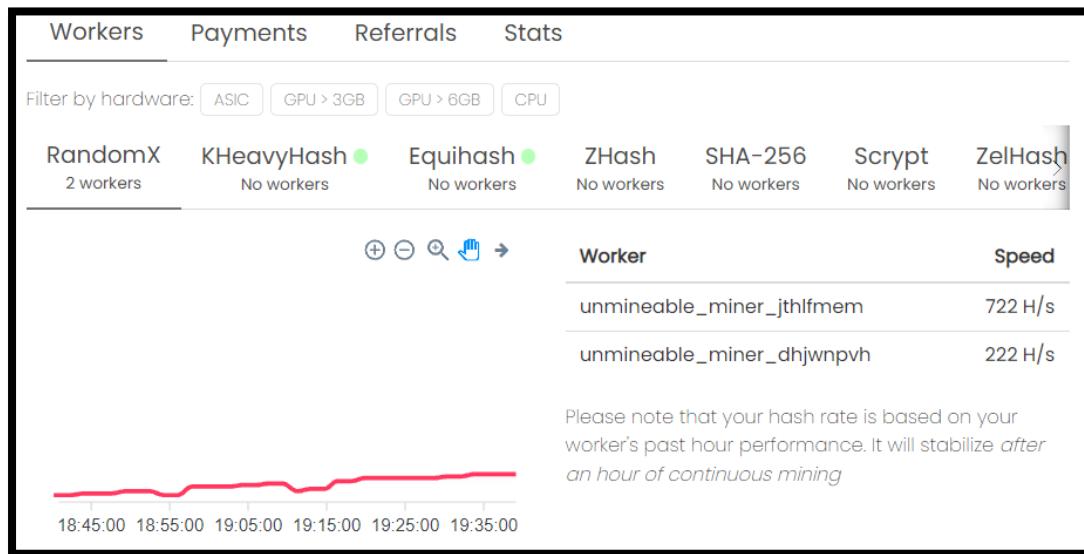


Figure 54 System 5 Dash Graph

In this graph that shows the progression throughout the mining for Dash, it highlights the speed in which System 5 was able to mine at. System 5 is labelled as “unmineable_miner_dhjwnpvh” and it was able to mine at 222 H/s consistently.

8.3.2 System 5 ZCash unMineable

After Dash was mined and recorded, it was set to mine ZCash for one hour and see what result will display after the timer stops.

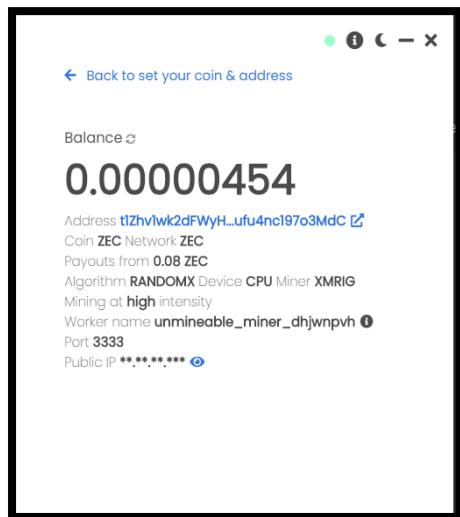


Figure 55 System 5 ZCash Result

When System 5 was left running for the one hour, it was able to mine “0.00000454 ZEC” coins.

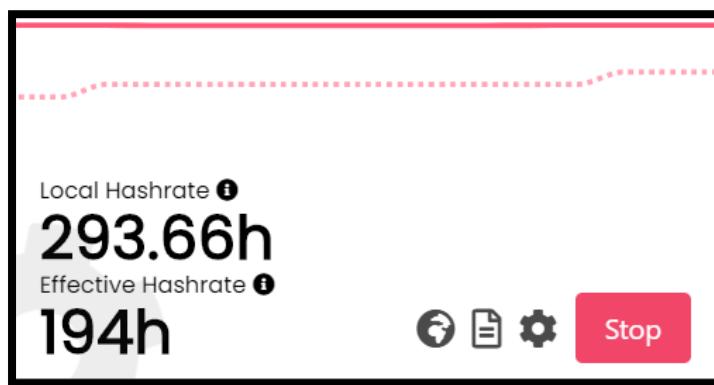


Figure 56 System 5 ZCash Hash Rate

Throughout the mining process, System 5 could reach up to 194 Hash rates per second when mining ZCash. It was a little less than the local hash rate but that's because the pool traffic was quite busy at the testing time.

Analysis of System Performances

during Crypto Mining

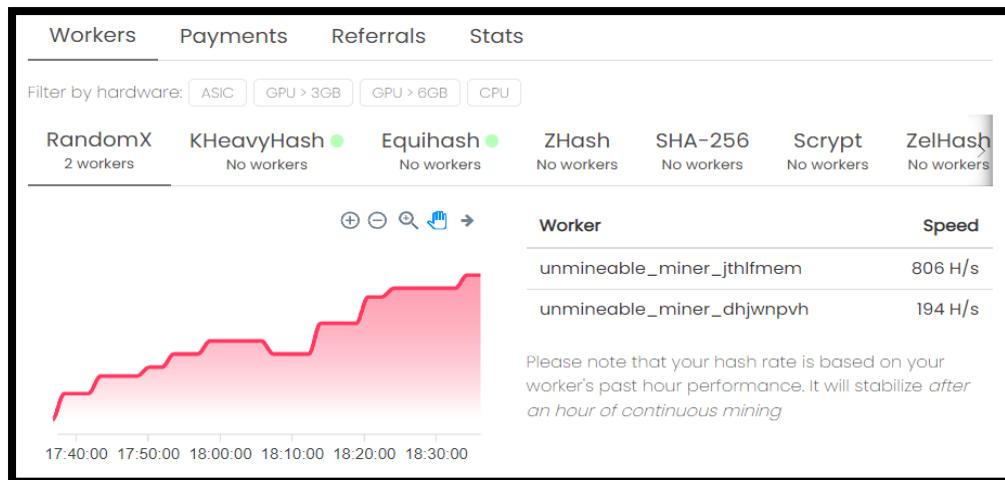


Figure 57 System 5 ZCash Graph

In the graph above, it displays on how well System 5 was performing throughout the hour of mining ZCash. System 5 is labelled at “unmineable_miner_dhjwnpvh” within the work box. It was mining at a hash rate of 194 H/s.

8.3.3 System 5 Litecoin unMineable

After System 5 has completed the mining of ZCash after one hour, it then moved on and started mining Litecoin for another hour.

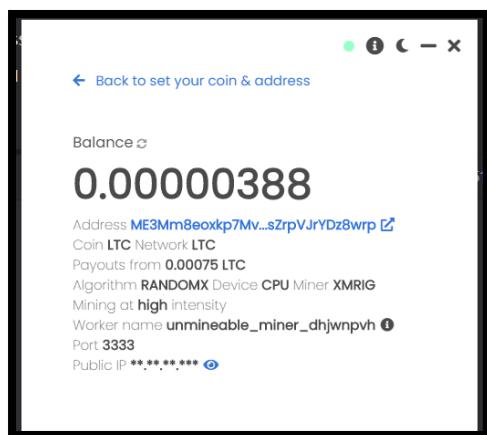


Figure 58 System 5 Litecoin Result

After an hour has passed, System 5 mined up to 0.00000388 Litecoin.

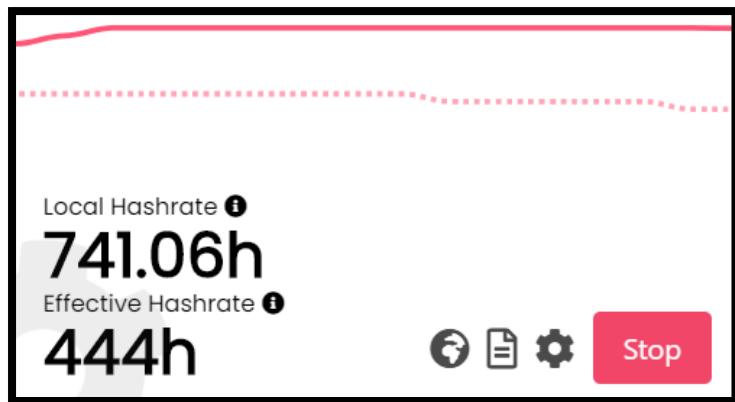


Figure 59 System 5 Litecoin Hash Rate

System 5 was mining Litecoin at a hash rate of 444 H/s. The effective hash rate was almost half the hash rate of the local. This was caused as within the mining pool it was quite difficult to find any blocks.

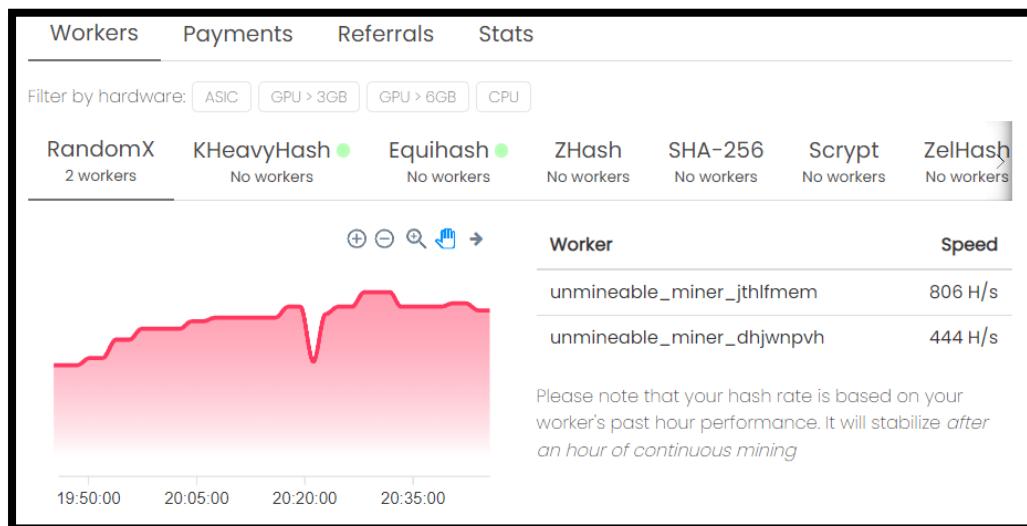


Figure 60 System 5 Litecoin Graph

This is the graph that displays on how System 5 has performed throughout the mining process. In this case System 5 was labelled as “unmineable_miner_dhjwnpvh”, it was able to mine at a hash rate of 444 H/s.

System 6	AVITA NS14A6
CPU	AMG Ryzen 3 3300U
RAM	4GB 2400Mhz
Broadband	Gigabyte Ethernet LAN (1000MB/s)
Power Supply	120W AC Adapter

8.3.4 System 6 Bitcoin unMineable

After leaving System 6 running in the background for one hour while mining Bitcoin, all stats were recorded.

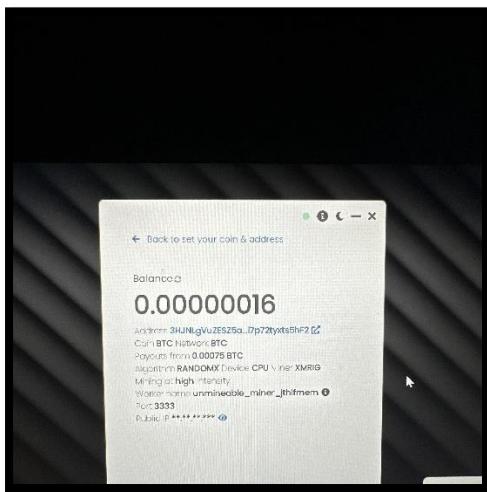


Figure 61 System 6 Bitcoin Result

System 6 unfortunately wasn't able to mine enough Bitcoin for it to change on the UI displayed in the image.

```
net      new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2879283 (113 tx)
miner   speed 10s/60s/15m 544.3 559.1 n/a H/s max 568.1 H/s
cpu     accepted (1/0) diff 100001 (39 ms)
```

Figure 62 System 6 Bitcoin Logs

In this image it shows the logs of the mining, on the line label "CPU" it shows that the CPU which is being used has been accepted and in the next line it shows the performance of the CPU.

- The mining rate, measured in hashes per second (H/s), is "544.3, 559.1, n/a" for each of the aforementioned time periods. This shows that the mining hash rate was 544.3 in the first ten seconds, 559.1 in the following sixty seconds, and n/a in the following fifteen minutes. This indicates that the connection between the system and the mining pool may have been temporarily lost before immediately functioning again.
- The phrase "max 568.1 H/s" refers to the fastest mining speed that the program or mining equipment was capable of achieving throughout the measurement periods. This shows that the hardware or software can mine at a maximum pace of 568.1 H/s at some time throughout the mining operation.

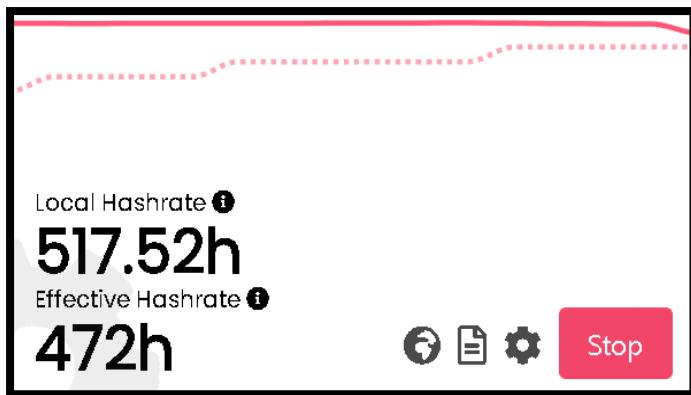


Figure 63 System 6 Bitcoin Hash Rate

Throughout the mining scenario, System 6 was able to mine at a hash rate of 472 H/s. This time the effective hash rate was extremely close to the local hash rate just by 45.52 H/s. The pool was once again quite busy but not as busy as the previous coins mined before.

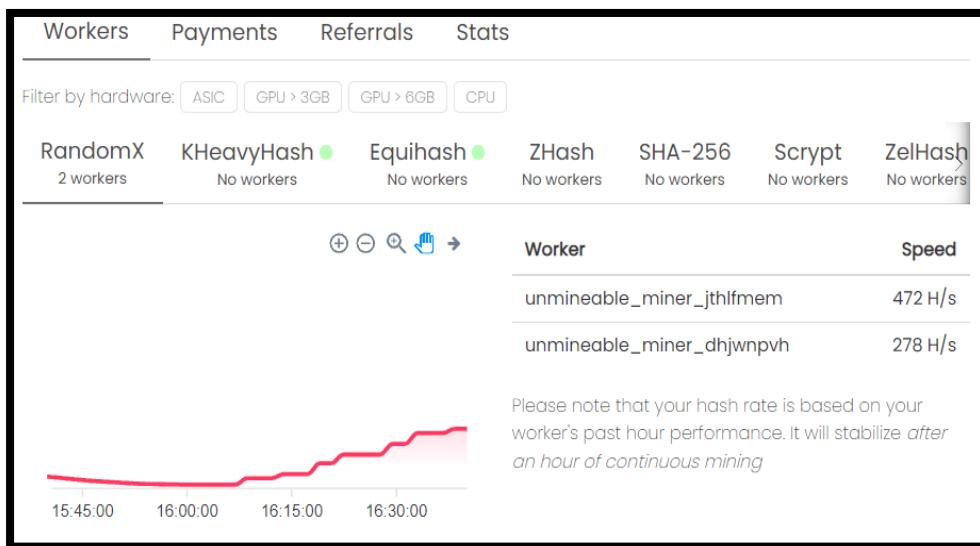


Figure 64 System 6 Bitcoin Graph

In this graph it displays on how well System 6 has performed throughout the hour of mining Bitcoin. System 6 is labelled as “unmineable_miner_jthlfmem” and was sitting at a hash rate of 472 H/s.

8.3.5 System 6 Ethereum unMineable

When System 6 has been running for one hour of mining Ethereum, here at the final results on how it performed.

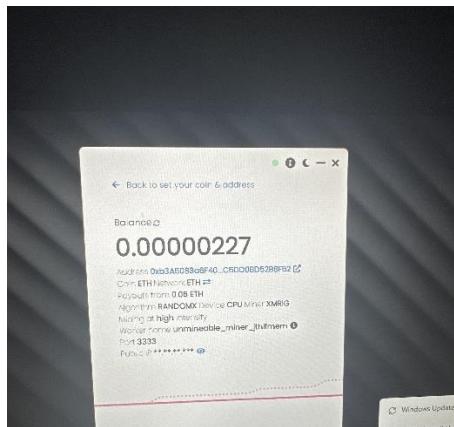


Figure 65 System 6 Ethereum Result

It displays that System 6 was able to mine up to 0.00000016 Ethereum in the space of one hour. It shows that it mined 0.00000227 because it continued from where System 5 stopped mining which it stopped at 0.00000211.



Figure 66 System 6 Ethereum Hash Rate

In this image it shows on how much hash rate System 6 was able to reach while mining Ethereum. It managed to get a bigger hash rate than the local hash rate, this is because of the network bandwidth speed within the System and the mining pool of Ethereum.

```
net      new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2879306 (10 tx)
cpu      accepted (7/0) diff 100001 (20 ms)
miner    speed 10s/60s/15m 548.9 557.2 398.9 H/s max 564.0 H/s
```

Figure 67 System 6 Ethereum Logs

In this image it shows that the network handshake (successful connection) between the mining pool and system, it also shows that the CPU has been accepted and is ready to mine and in the final line it displays on how it performed.

Analysis of System Performances

during Crypto Mining

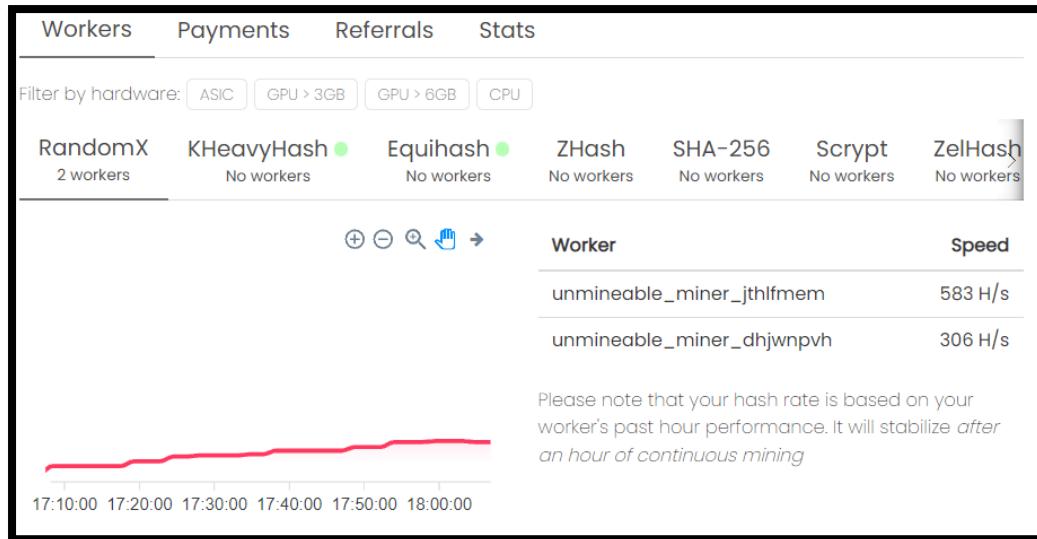


Figure 68 System 6 Ethereum Graph

In this image it displays the consistent hash rate at which System 6 was mining Ethereum at. System 6 in this image is labelled as “unmineable_miner_jthlfmem” and was getting a hash rate of 583 H/s.

8.3.6 System 6 Litecoin unMineable

After System 6 has been mining Litecoin for one hour without stopping, here are the accurate results in which have been giving back.

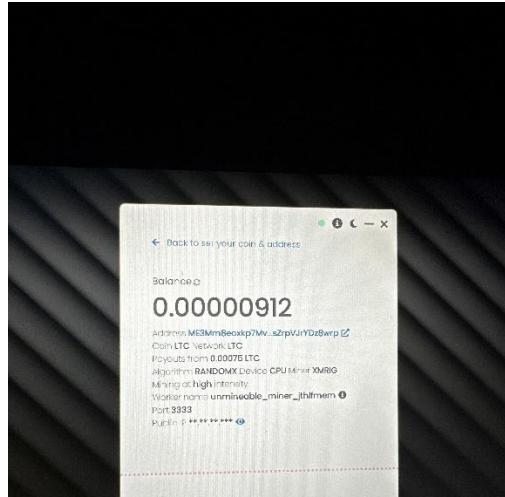


Figure 69 System 6 Litecoin Result

System 6 had the ability to mine up to 0.00000524 Litecoin within the space of one hour. In the image it shows 0.00000912, this is because the mining started from where System5 finished mining which was at 0.00000388 Litecoin.

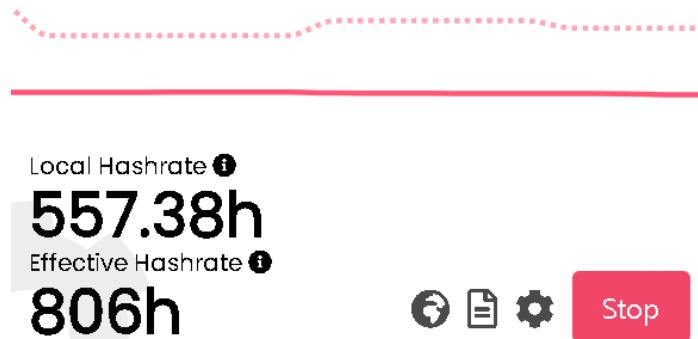


Figure 70 System 6 Litecoin Hash Rate

System 6 was consistently mining Litecoin at a hash rate of 806 H/s. In this case the effective hash rate is much more than the local hash rate, this is because of the Network bandwidth between the system and the mining pool, it could also possibly be luck for not being interrupted within the mining traffic against other miners.

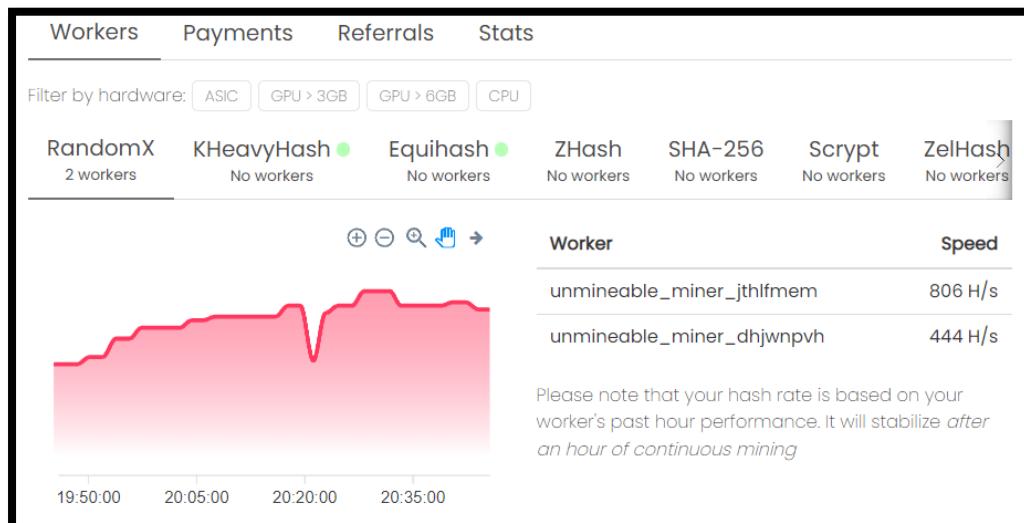


Figure 71 System 6 Litecoin Graph

Here shows the hash rate speed at which System6 was mining at, and it also displays the up and downs throughout the mining process. In this image System 6 is labelled as "unmineable_miner_jthlfmem".

```
cpu      accepted (46/0) diff 100001 (16 ms)
net      new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2881582 (13 tx)
miner   speed 10s/60s/15m 556.0 568.7 566.7 H/s max 580.1 H/s
```

Figure 72 System 6 Litecoin Logs

In this image we can see that the CPU has been accepted and is ready to start mining, it also shows that the network has made handshake with the Litecoin mining pool, finally it also shows the speed of the hash rate within the first 10 seconds 60 seconds and 15 minutes.

8.3.7 System 6 ZCash unMineable

After System 6 has been mining ZCash for one hour, here are all the in-depth results which have been returned.

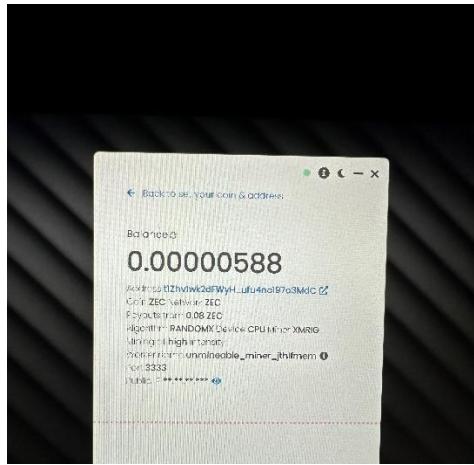


Figure 73 System 6 ZCash Result

Overall, System 6 was able to mine 0.00000132 ZCash in the space of one full hour without stopping it.

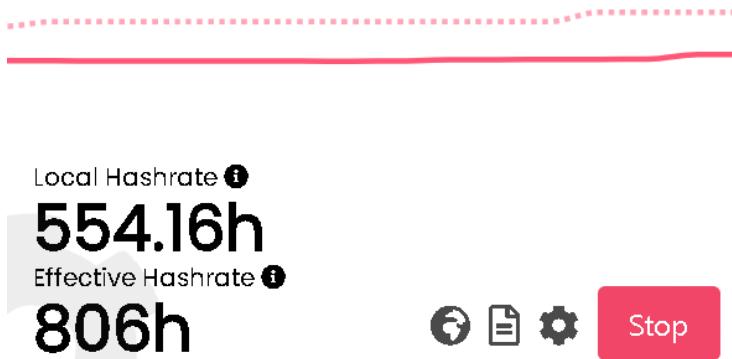


Figure 74 System 6 ZCash Hash Rate

While System 6 was left running for one hour, it managed to mine ZCash at a hash rate of 806 H/s, this time the effective hash rate was much bigger than the local hash rate. This again was caused of the network bandwidth connection between the system and the ZCash mining pool.

Analysis of System Performances

during Crypto Mining

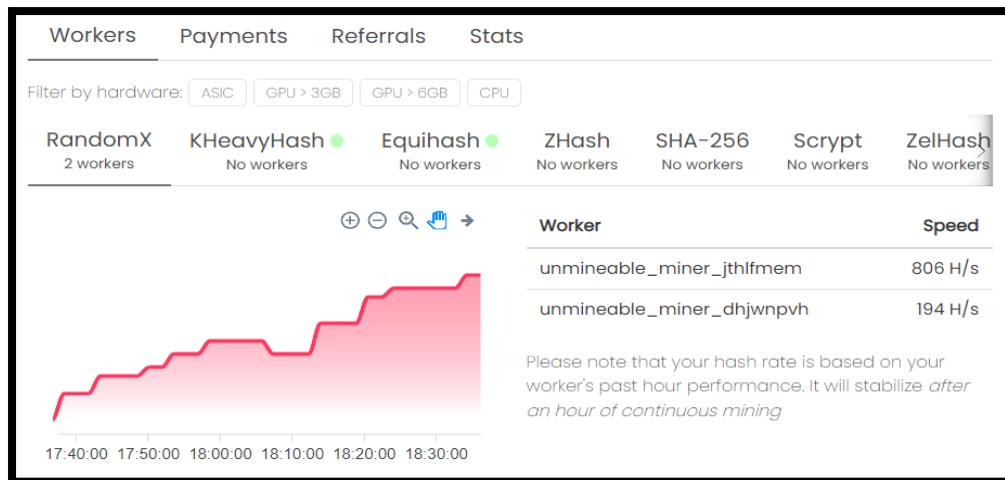


Figure 75 System 6 ZCash Graph

Here is a quick graph displaying on how well System 6 performed while mining ZCash. System 6 is labelled as the “unmineable_miner_jthlfmem” worker and it was mining at 806 H/s.

8.3.8 System 6 Dash unMineable

After System 6 has been mining Dash coin for one hour, all results were recorded by the use of a GUI and a graph.

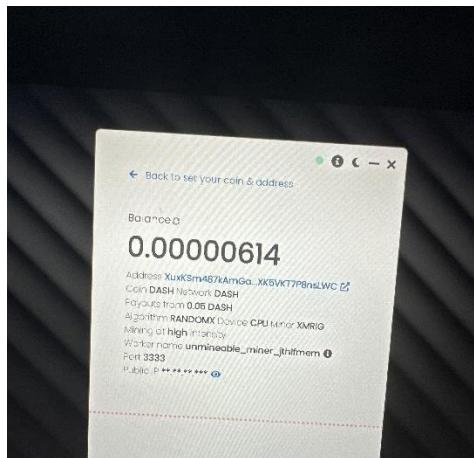


Figure 76 System 6 Dash Result

When System 6 finished mining Dash coin for the full hour, it recorded that it has mined 0.00000407 Dash coin. In this stated image it shows that it mined 0.00000614 but that is because it continued from the System 5 mining process.

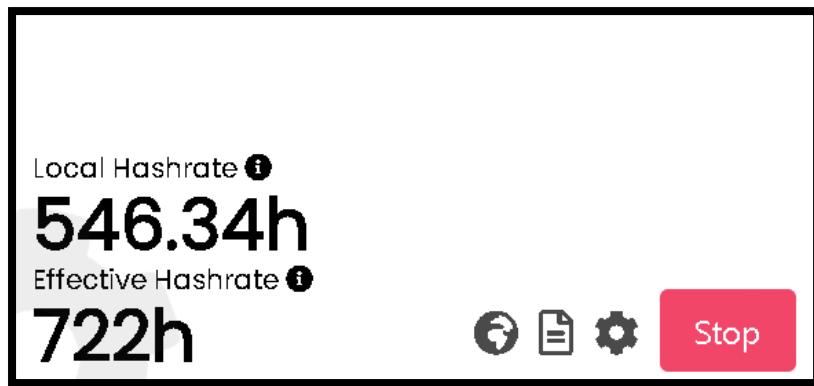


Figure 77 System 6 Dash Hash Rate

Overall, the effective hash rate was sitting stable at around 700-722 H/s. This time once again, the effective hash rate was more than the local hash rate, for the same reason again, the mining pool had good connection with System 6.

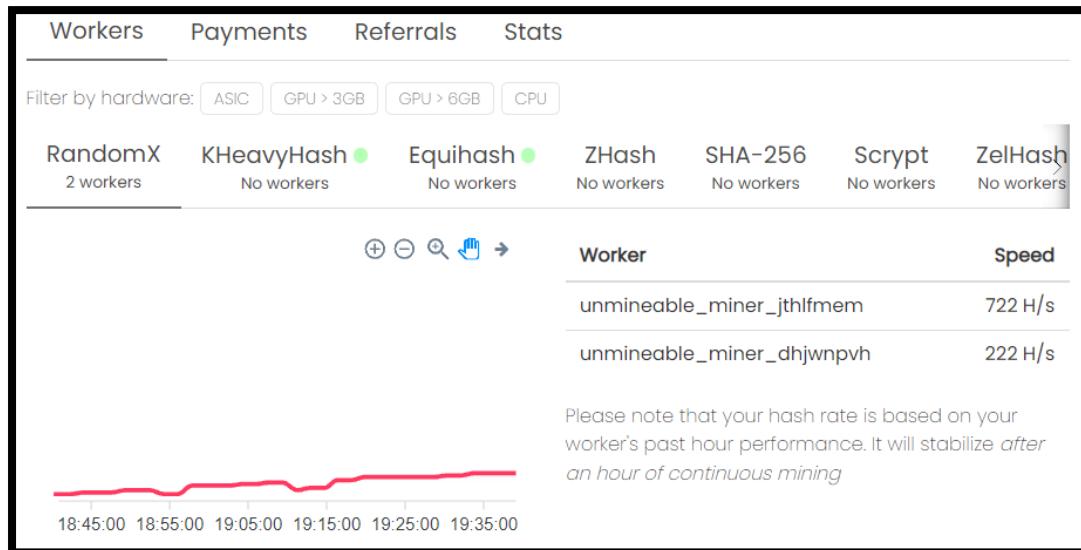


Figure 78 System 6 Dash Graph

In this final image of the System 6 mining process, it shows how well the system performed while mining. System 6 in this image is once again labelled as “unmineable_miner_jthlfmem” and it was able to mine at a hash rate of 722 H/s constantly.

8.3.9 System 7 Bitcoin unMineable

System 7	Lenovo V330-151KB
CPU	Intel(R) Core (TM) i5-8250U CPU @ 1.60GHz 1.80 GHz
RAM	8GB
GPU	Intel(R) UHD Graphics 620
INTERNET	GIGABIT

Analysis of System Performances

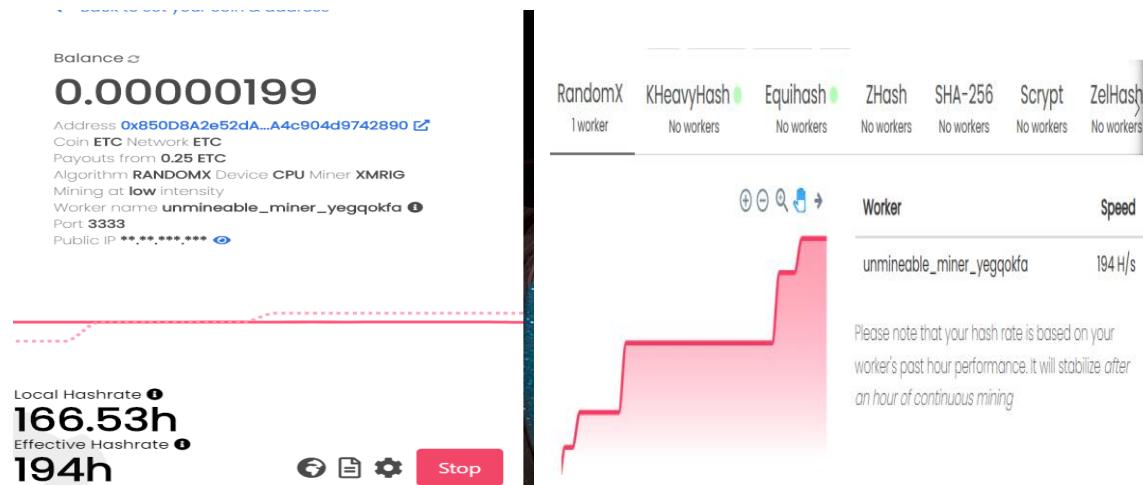
during Crypto Mining

The first crypto currency mined was Bitcoin (BTC). Mining was done for 1 hour period. Tool used for this was unMineable. Mining was done for this using the CPU. The balance before mining was started was 0.00000000. After mining was done for the time period it had remained at 0.00000000 as seen in the screenshots. The effective hash rate had changed to 83h/s



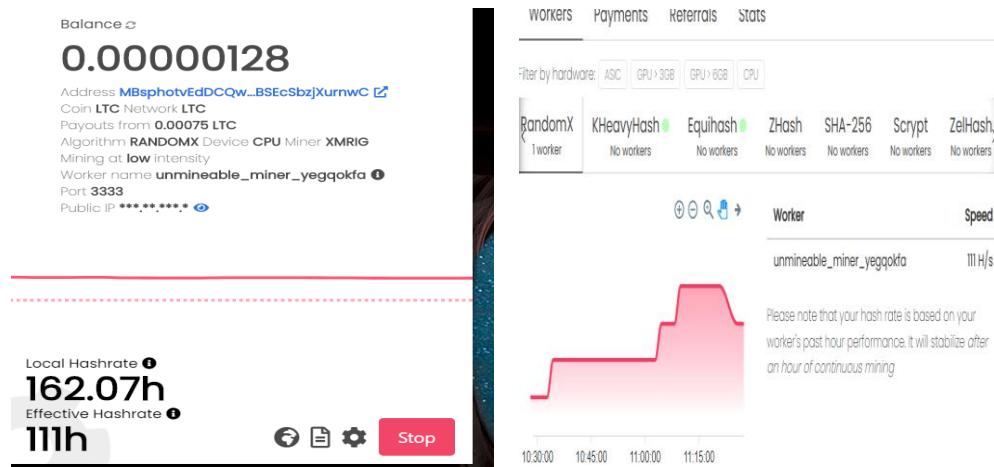
8.4.0 System 7 Ethereum

The first mining tool used for this crypto currency Ethereum (ETC) was unMineable.



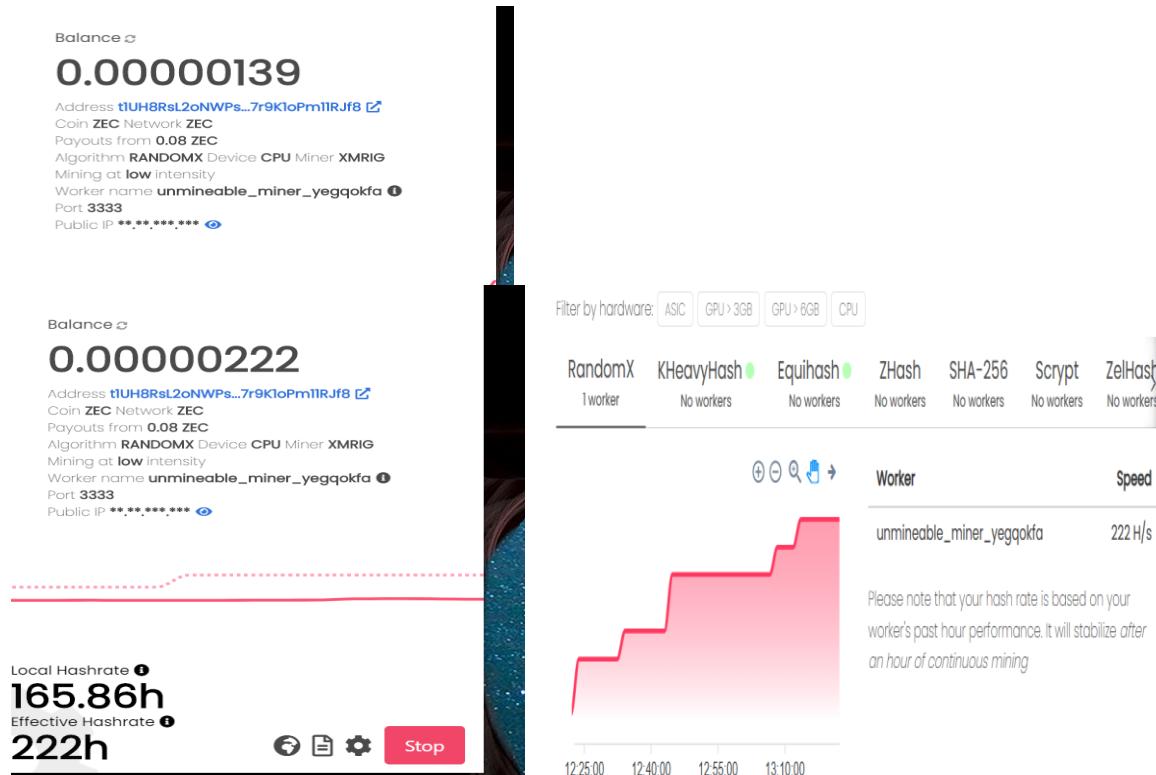
The mining was done for one hour duration using the CPU of the device. At the start of the mining, the balance had been 0.00000000 and at the end of the hour time frame it had increased to 0.00000199 with the hash rate of 194H/S from the above.

8.4.1 System 7 Litecoin (LTC)



Mining was done for one hour duration for Litecoin (LTC) using CPU of device. Before mining had begun, the balance was 0.00000000 After the one-hour timeframe the balance had risen to 0.00000128. The effective hash rate was 111h/s as seen above.

8.4.2 System 1 ZCash (ZEC) unMineable



For the mining of ZCash initially before the one-hour duration the balance had been 0.00000139 initially. We can see that the effective hash rate 0h.

After the one-hour duration of mining ZCash (ZEC) using the CPU of the device, the balance had risen to 0.00000222 and the effective hash rate had increased to 222h/s.

Analysis of System Performances

during Crypto Mining

8.4.3 System 1 Dash (DASH)

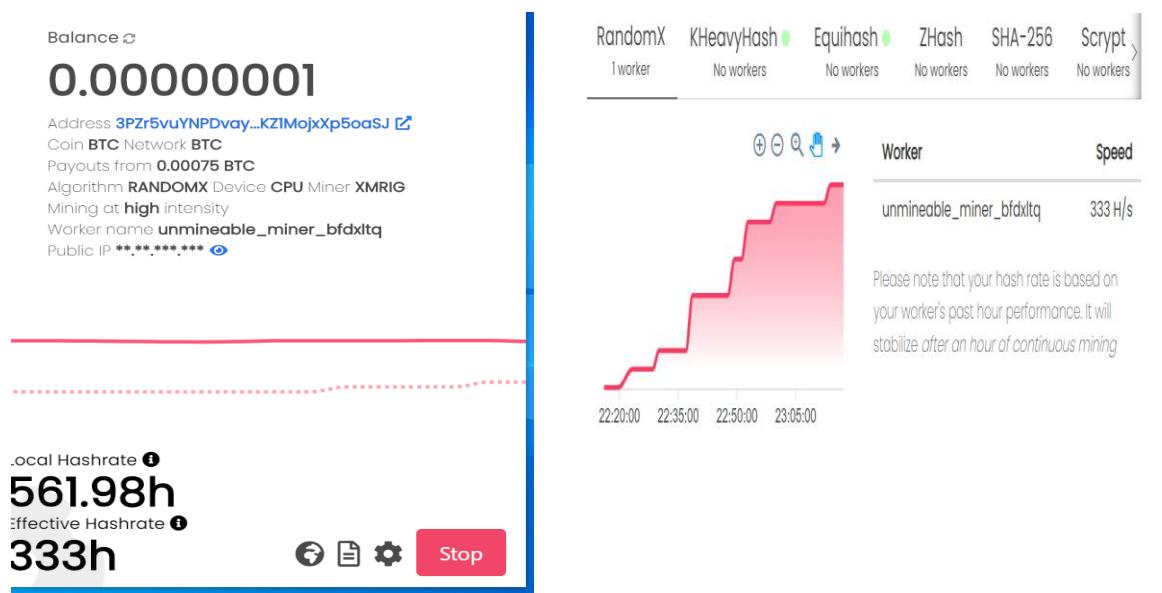


Mining of dash (DASH) was done for the one-hour duration. The mining was done using the CPU. At the end of the one-hour duration the balance had increased to 0.00000817 from 0.00000000 initially at the start. The hash rate had been 194h/s for one worker and 525h/s for the second one.

8.4.4 System 8 Bitcoin unMineable

System 8	HP Spectre x360 Convertible 13-w0XX
CPU	Intel® Core™ i7-7500U CPU @ 2.70GHz, 2904
RAM	8.0GB
GPU	Intel® HD Graphics 620
INTERNET	GIGABIT

The first crypto currency mined for this machine was Bitcoin (BTC) using the CPU unMineable Tool.

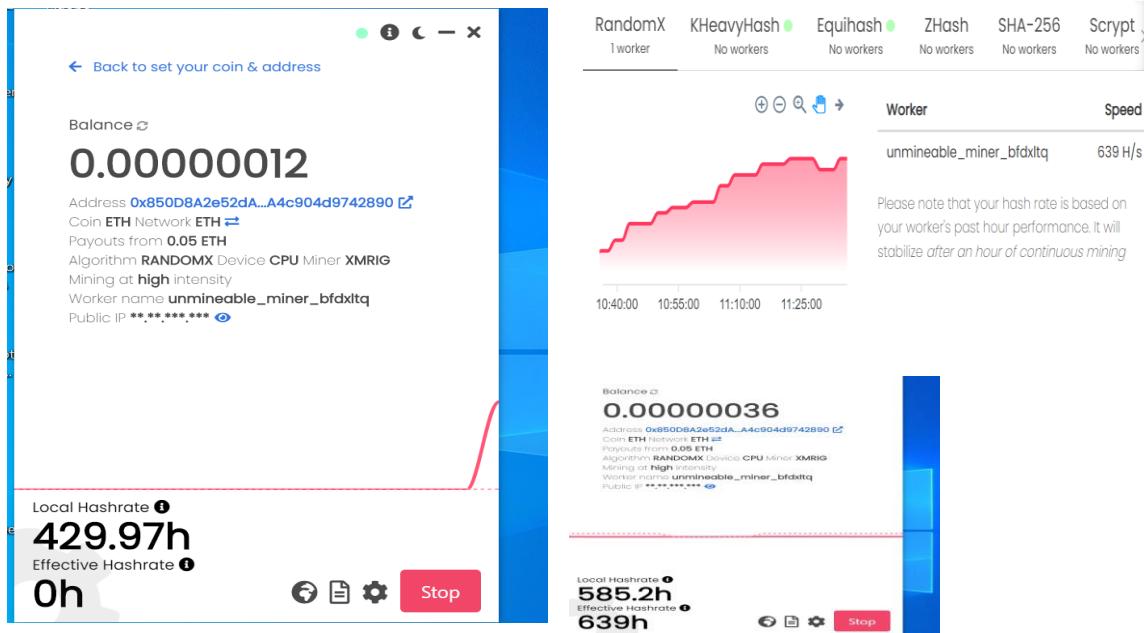


Analysis of System Performances

during Crypto Mining

Mining was done for one hour duration initially starting at balance of 0.00000000 and then the balance had gone up to 0.00000001 after the hour duration. The effective hash rate was at 333h/s

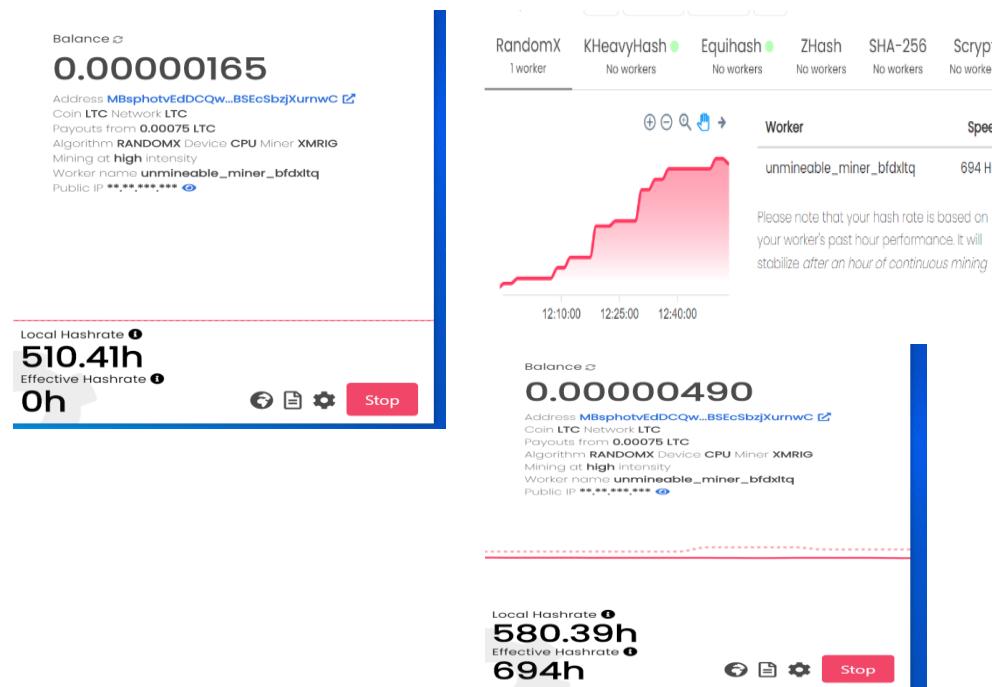
8.4.5 System 8 Bitcoin unMineable



Ethereum was mined using this system. Before Mining had started, we had an initial balance of 0.00000012 with the effective hash rate at 0.

After the duration of mining for one hour the balance for (ETC) had increased to 0.00000036 the effective hash rate had also changed to 639h/s

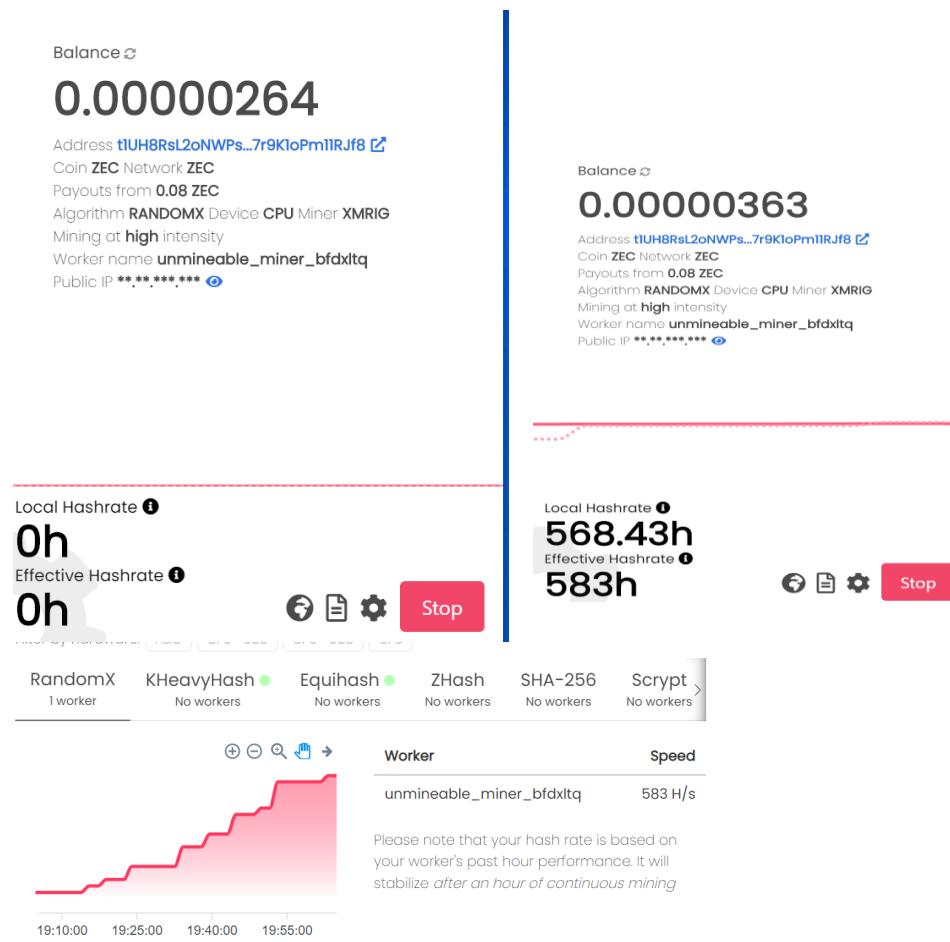
8.4.6 System 8 Litecoin (LTC) unMineable



Before starting the mining of LTC, the initial balance was 0.00000165 and hash rate was 0h/s. This was before the one-hour timeframe.

After the one-hour duration of mining of LTC, it is seen that the balance increased to 0.00000490 from the initial balance of 0.00000165. The hash rate increased to 694h/s.

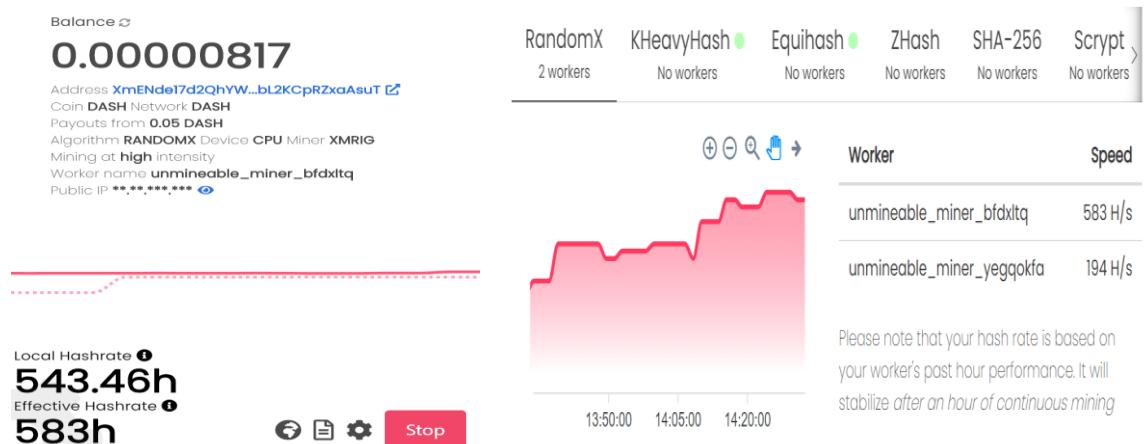
8.4.7 System 8 ZCash (ZTC) unMineable



When we were Starting the mining process for ZTC, initially we had a balance of 0.00000264 before any mining process had been carried out.

After the one-hour duration of mining, we can see our balance increase to 0.00000363 from the initial balance of 0.00000264. we can see our hash rate increase to 583h/s.

8.4.8 System 8 Dash (DASH) unMineable



Mining for Dash (DTC) was done for duration of one hour. Initially when starting mining we had 0.00000000 balance. After the one-hour duration we had a balance of 0.00000817 and effective hashrate of 583h/s and 194h/s for two workers.

8.5 Results while mining with XMRig

System 1	HP Laptop 15s-fq1xxx
CPU	Intel i7 - 1065G7 CPU @ 1.30GHz
RAM	8GB SODIMM
GPU	Intel Iris Plus Graphics
INTERNET	GIGABIT

8.5.0 System 1 Bitcoin XMRig

The 1st crypto mining tool that was used for this device was XMRig.

Here is the first device mining Bitcoin (BTC) using the XMRig tool:

Analysis of System Performances

during Crypto Mining

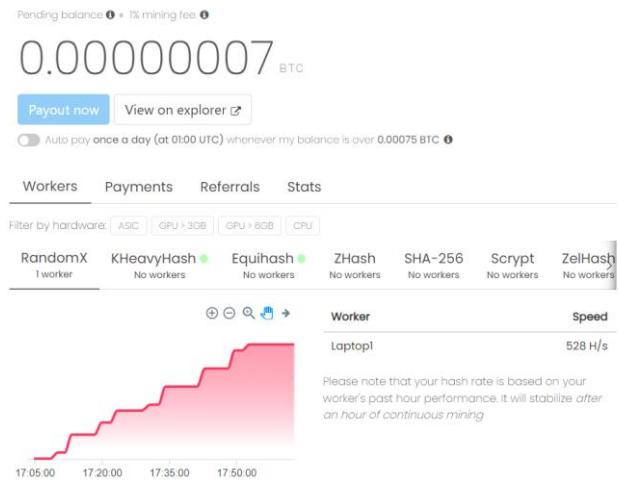


Figure 79 System 1 Bitcoin Result

```
miner speed 10s/60s/15m 771.6 815.9 827.6 H/s max 897.4 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882927 (60 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882927 (81 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882928 (20 tx)
cpu accepted (20/0) diff 100001 (20 ms)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882929 (17 tx)
miner speed 10s/60s/15m 842.9 817.6 824.9 H/s max 897.4 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882929 (22 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882929 (35 tx)
miner speed 10s/60s/15m 845.8 844.0 824.7 H/s max 897.4 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882929 (42 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882929 (53 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882930 (54 tx)
cpu accepted (21/0) diff 100001 (20 ms)
miner speed 10s/60s/15m 838.6 837.9 823.9 H/s max 897.4 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882930 (62 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882930 (69 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882931 (6 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882931 (15 tx)
miner speed 10s/60s/15m 692.1 716.4 814.9 H/s max 897.4 H/s
```

Figure 80 System 1 Bitcoin Mining Statistics

This was the result of Bitcoin (BTC) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00000007 and after the mining session it had rose to 0.00000007. We can see the hash rate during this hour was 528H/s.

8.5.1 System 1 Ethereum XMRRig

The 2nd crypto mining tool that was used for this device was XMRRig tool.

Here is the first device mining Ethereum (ETH) using the XMRRig tool:

Analysis of System Performances

during Crypto Mining

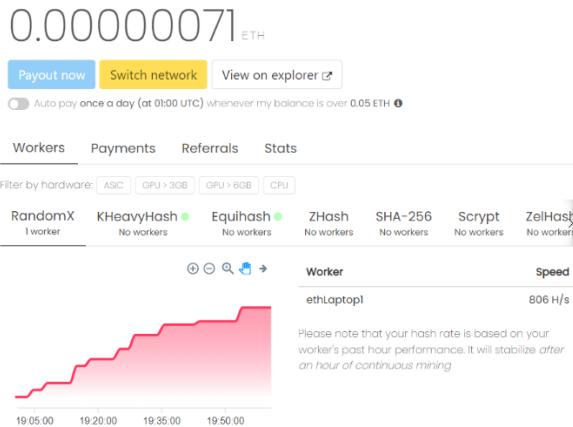


Figure 81 System 1 Ethereum Result

```
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882992 (127 tx)
cpu accepted (31/0) diff 100001 (18 ms)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882992 (131 tx)
cpu accepted (32/0) diff 100001 (18 ms)
miner speed 10s/60s/15m 848.7 844.2 839.3 H/s max 900.6 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882992 (136 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882992 (142 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882992 (142 tx)
miner speed 10s/60s/15m 845.3 845.2 839.0 H/s max 900.6 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882992 (140 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882992 (140 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882992 (140 tx)
miner speed 10s/60s/15m 837.6 826.5 838.6 H/s max 900.6 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882992 (140 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882992 (140 tx)
miner speed 10s/60s/15m 838.2 842.6 838.2 H/s max 900.6 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882992 (140 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882992 (141 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882992 (141 tx)
miner speed 10s/60s/15m 833.1 838.7 837.4 H/s max 900.6 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882992 (141 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882992 (140 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882992 (140 tx)
miner speed 10s/60s/15m 844.1 828.2 836.1 H/s max 900.6 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882992 (140 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882992 (141 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882992 (141 tx)
miner speed 10s/60s/15m 280.0 710.8 826.9 H/s max 900.6 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2882992 (141 tx)
```

Figure 82 System 1 Ethereum Mining Statistics

This was the result of Ethereum (ETC) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00000064 and after the mining session it had rose to 0.00000071. We can see that hash rate during this hour was 806H/s.

8.5.2 System 1 Litecoin XMRig

The 3rd crypto mining tool that was used for this device was XMRig tool.

Here is the first device mining Litecoin (LTC) using the XMRig tool:

Analysis of System Performances

during Crypto Mining

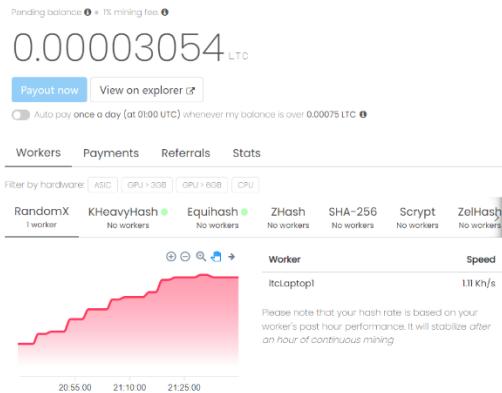


Figure 83 System 1 Litecoin Result

```
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883046 (75 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883046 (84 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883046 (92 tx)
miner speed 10s/60s/15m 854.1 851.0 841.9 H/s max 884.4 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883046 (98 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883046 (101 tx)
cpu accepted (54/0) diff 100001 (22 ms)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883046 (107 tx)
miner speed 10s/60s/15m 849.4 849.2 849.0 H/s max 884.4 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883046 (119 tx)
net accepted (55/0) diff 100001 (22 ms)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883047 (5 tx)
miner accepted (55/0) diff 100001 (22 ms)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883047 (8 tx)
miner speed 10s/60s/15m 847.2 846.5 841.6 H/s max 884.4 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883047 (18 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883047 (19 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883048 (2 tx)
miner speed 10s/60s/15m 852.7 851.0 841.5 H/s max 884.4 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883048 (12 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883048 (21 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883048 (34 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883049 (2 tx)
miner speed 10s/60s/15m 748.5 781.0 839.3 H/s max 884.4 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883049 (19 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883049 (36 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883050 (16 tx)
miner speed 10s/60s/15m 531.1 695.8 826.0 H/s max 884.4 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883050 (26 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883050 (32 tx)
```

Figure 84 System 1 Litecoin Mining Statistics

This was the result of Litecoin (LTC) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00001546 and after the mining session it had rose to 0.00003054. We can see that the hash rate during this hour was 1.11Kh/s.

8.5.3 System 1 ZCash XMRig

The 4th crypto mining tool that was used for this device was XMRig too.

Here is the first device mining ZCash (ZEC) using the XMRig tool:

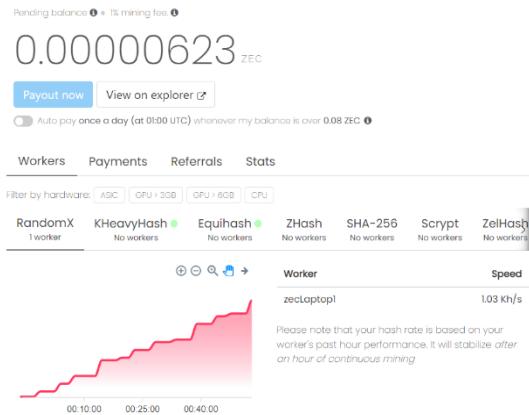


Figure 85 System 1 ZCash Result

```
net new job from rx.umineable.com:3333 diff 100001 algo rx/0 height 2883139 (100 tx)
cpu accepted (37/0) diff 100001 (20 ms)
miner speed 10/60s/15m 835.1 833.8 817.7 H/s max 877.2 H/s
net new job from rx.umineable.com:3333 diff 100001 algo rx/0 height 2883139 (100 tx)
net new job from rx.umineable.com:3333 diff 100001 algo rx/0 height 2883139 (101 tx)
net new job from rx.umineable.com:3333 diff 100001 algo rx/0 height 2883139 (101 tx)
miner speed 10/60s/15m 844.2 784.7 814.2 H/s max 877.2 H/s
net new job from rx.umineable.com:3333 diff 100001 algo rx/0 height 2883139 (101 tx)
net new job from rx.umineable.com:3333 diff 100001 algo rx/0 height 2883139 (101 tx)
net new job from rx.umineable.com:3333 diff 100001 algo rx/0 height 2883140 (37 tx)
net new job from rx.umineable.com:3333 diff 100001 algo rx/0 height 2883140 (38 tx)
miner speed 10/60s/15m 841.1 838.2 814.5 H/s max 877.2 H/s
net new job from rx.umineable.com:3333 diff 100001 algo rx/0 height 2883140 (52 tx)
net new job from rx.umineable.com:3333 diff 100001 algo rx/0 height 2883140 (60 tx)
net new job from rx.umineable.com:3333 diff 100001 algo rx/0 height 2883141 (3 tx)
miner speed 10/60s/15m 840.1 839.5 814.8 H/s max 877.2 H/s
net new job from rx.umineable.com:3333 diff 100001 algo rx/0 height 2883141 (11 tx)
net new job from rx.umineable.com:3333 diff 100001 algo rx/0 height 2883142 (2 tx)
cpu accepted (38/0) diff 100001 (20 ms)
net new job from rx.umineable.com:3333 diff 100001 algo rx/0 height 2883142 (7 tx)
net new job from rx.umineable.com:3333 diff 100001 algo rx/0 height 2883142 (27 tx)
miner speed 10/60s/15m 835.5 836.9 815.1 H/s max 877.2 H/s
net new job from rx.umineable.com:3333 diff 100001 algo rx/0 height 2883142 (38 tx)
cpu accepted (39/0) diff 100001 (19 ms)
net new job from rx.umineable.com:3333 diff 100001 algo rx/0 height 2883142 (47 tx)
speed 10/60s/15m 833.0 836.1 815.2 H/s max 877.2 H/s
net new job from rx.umineable.com:3333 diff 100001 algo rx/0 height 2883142 (62 tx)
net new job from rx.umineable.com:3333 diff 100001 algo rx/0 height 2883142 (65 tx)
net new job from rx.umineable.com:3333 diff 100001 algo rx/0 height 2883142 (66 tx)
```

Figure 86 System 1 ZCash Minin Statistics

This was the result of ZCash (ZEC) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00000270 and after the mining session it had rose to 0.00000623. We can see the effective hash rate during this hour was 1.03Kh/s.

8.3.5 System 1 Dash XMRig

The final crypto mining tool that was used for this device was XMRig tool.

Here is the first device mining Dash (DASH) using the XMRig tool:

Analysis of System Performances

during Crypto Mining

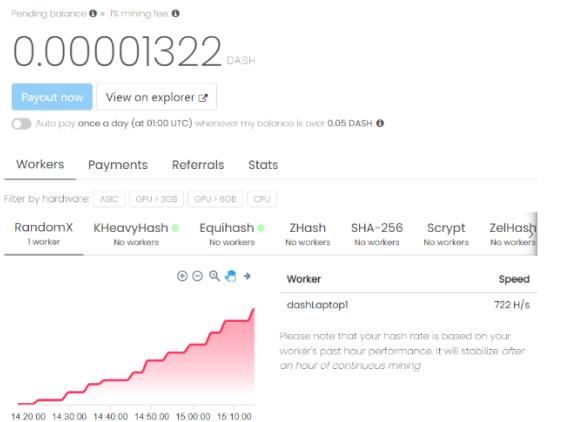


Figure 87 System 1 Dash Result

```
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883563 (105 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883563 (109 tx)
miner speed 10s/60s/15m 844.9 779.0 853.7 H/s max 895.4 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883563 (113 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883563 (114 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883563 (114 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (9 tx)
miner speed 10s/60s/15m 841.2 841.6 852.0 H/s max 895.4 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (18 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (21 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (24 tx)
miner speed 10s/60s/15m 868.3 854.0 851.9 H/s max 895.4 H/s
cpu accepted (26/0) diff 100001 (29 ms)
cpu accepted (27/0) diff 100001 (28 ms)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (30 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (37 tx)
cpu accepted (28/0) diff 100001 (18 ms)
miner speed 10s/60s/15m 847.6 855.2 852.9 H/s max 895.4 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (43 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (49 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (52 tx)
cpu accepted (29/0) diff 100001 (18 ms)
miner speed 10s/60s/15m 848.6 801.9 848.1 H/s max 895.4 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (60 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (67 tx)
cpu accepted (30/0) diff 100001 (17 ms)
cpu accepted (31/0) diff 100001 (18 ms)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (71 tx)
miner speed 10s/60s/15m 651.6 811.2 844.2 H/s max 895.4 H/s
```

Figure 88 System 1 Dash Mining Statistics

This was the result of Dash (DASH) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00000924 and after the mining session it had rose to 0.00001322. We can see the effective hash rate during this hour was 722H/s.

This was the result of Dash (DASH) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00000924 and after the mining session it had rose to 0.00001322. We can see the effective hash rate during this hour was 722H/s.

8.5.4 System 2 Bitcoin XMRig

System 2	HP Beats 15 Notebook PC
CPU	AMD A8-5545M APU 1,700MHz
RAM	16.0GB DDR3
GPU	Radeon(tm) HD Graphics
INTERNET	GIGABIT

The 1st crypto mining tool that was used for this device was XMRig.

Here is the second device mining Bitcoin (BTC) using the XMRig tool:

Analysis of System Performances

during Crypto Mining



Figure 89 System 2 Bitcoin Result

```
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884275 (75 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884275 (86 tx)
cpu   accepted (18/0) diff 100001 (20 ms)
miner speed 10s/60s/15m 412.3 412.2 416.3 H/s max 449.4 H/s
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884275 (90 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884275 (96 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884275 (102 tx)
miner speed 10s/60s/15m 420.0 418.7 416.6 H/s max 449.4 H/s
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884275 (106 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884275 (106 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884275 (106 tx)
miner speed 10s/60s/15m 420.2 419.8 417.4 H/s max 449.4 H/s
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884275 (106 tx)
accepted (19/0) diff 100001 (21 ms)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884275 (106 tx)
cpu   accepted (20/0) diff 100001 (21 ms)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884276 (106 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884276 (106 tx)
miner speed 10s/60s/15m 420.1 419.6 417.5 H/s max 449.4 H/s
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884277 (25 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884277 (25 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884277 (37 tx)
miner speed 10s/60s/15m 420.6 419.8 418.1 H/s max 449.4 H/s
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884277 (39 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884277 (56 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884277 (68 tx)
cpu   accepted (21/0) diff 100001 (20 ms)
miner speed 10s/60s/15m 418.7 419.9 418.1 H/s max 449.4 H/s
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884277 (71 tx)
```

Figure 90 System 2 Bitcoin Mining Statistics

This was the result of Bitcoin (BTC) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00000007 and after the mining session risen to 0.00000011. We can see the hash rate during this hour was 472H/s.

8.5.5 System 2 Ethereum XMRig

The second crypto mining tool that was used for this device was XMRig tool.

Here is the second device mining Ethereum (ETH) using the XMRig tool:

Analysis of System Performances

during Crypto Mining

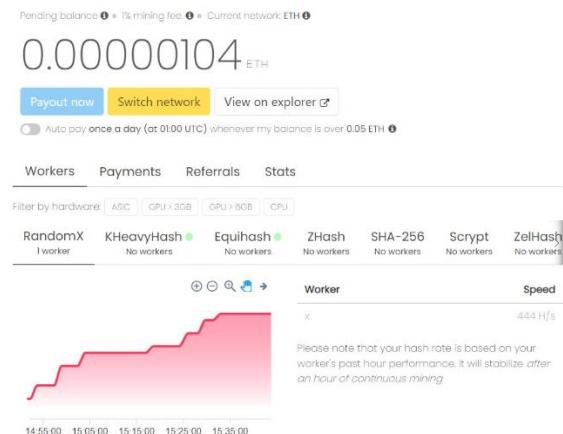


Figure 91 System 2 Ethereum Result

```
net: new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884320 (2 tx)
miner: speed 10s/60s/15m 420.0 418.9 415.6 H/s max 455.1 H/s
net: new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884320 (10 tx)
net: new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884320 (19 tx)
net: new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884320 (26 tx)
miner: speed 10s/60s/15m 418.9 417.8 416.7 H/s max 455.1 H/s
net: new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884320 (31 tx)
net: new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884320 (38 tx)
net: new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884320 (46 tx)
miner: speed 10s/60s/15m 417.5 418.5 416.7 H/s max 455.1 H/s
net: new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884320 (57 tx)
net: new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884321 (2 tx)
net: new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884321 (8 tx)
miner: speed 10s/60s/15m 418.9 418.4 416.8 H/s max 455.1 H/s
net: new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884322 (5 tx)
net: new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884322 (20 tx)
net: new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884322 (32 tx)
miner: speed 10s/60s/15m 416.3 417.7 416.3 H/s max 455.1 H/s
net: new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884322 (48 tx)
net: new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884323 (2 tx)
net: new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884323 (14 tx)
miner: speed 10s/60s/15m 417.1 409.3 417.2 H/s max 455.1 H/s
net: new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884323 (24 tx)
net: new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884323 (33 tx)
net: new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884324 (2 tx)
net: new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884324 (9 tx)
miner: speed 10s/60s/15m 419.0 416.4 417.2 H/s max 455.1 H/s
net: new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884324 (17 tx)
net: new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884324 (22 tx)
```

Figure 92 System 2 Ethereum Mining Statistics

This was the result of Ethereum (ETH) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00000071 and after the mining session it had risen to the amount of 0.00000104. We can see the hash rate during this hour was at 444H/s.

8.5.6 System 2 Litecoin XMRig

The second crypto mining tool that was used for this device was XMRig.

Here is the second device mining Litecoin (LTC) using the XMRig tool:

Analysis of System Performances

during Crypto Mining

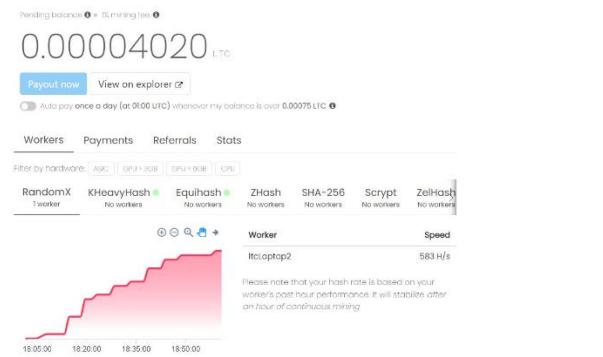


Figure 93 System 2 Litecoin Result

```
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884416 (81 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884416 (87 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884416 (87 tx)
miner speed 10s/60s/15m 409.8 398.0 410.6 H/s max 463.2 H/s
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884416 (88 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884417 (14 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884418 (1 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884418 (6 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884419 (2 tx)
miner speed 10s/60s/15m 329.3 401.3 400.9 H/s max 463.2 H/s
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884419 (15 tx)
cpu   accepted (21/0) diff 100000 (20 ms)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884419 (16 tx)
miner speed 10s/60s/15m 417.3 414.6 400.8 H/s max 463.2 H/s
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884419 (23 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884419 (25 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884419 (29 tx)
miner speed 10s/60s/15m 415.1 413.2 400.6 H/s max 463.2 H/s
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884419 (36 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884419 (64 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884419 (68 tx)
miner speed 10s/60s/15m 415.0 417.4 400.8 H/s max 463.2 H/s
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884419 (74 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884419 (79 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884419 (96 tx)
miner speed 10s/60s/15m 395.5 413.0 400.5 H/s max 463.2 H/s
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884419 (100 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884420 (1 tx)
cpu   accepted (22/0) diff 100001 (21 ms)
```

Figure 94 System 2 Litecoin Mining Statistics

This was the result of Litecoin (LTC) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00003054 and after the mining session it risen to 0.00004020. We can see the hash rate during this hour was 583H/s.

8.5.7 System 2 ZCash XM Rig

The second crypto mining tool that was used for this device was XM Rig.

Here is the second device mining ZCash (ZEC) using the XM Rig tool:

Analysis of System Performances

during Crypto Mining

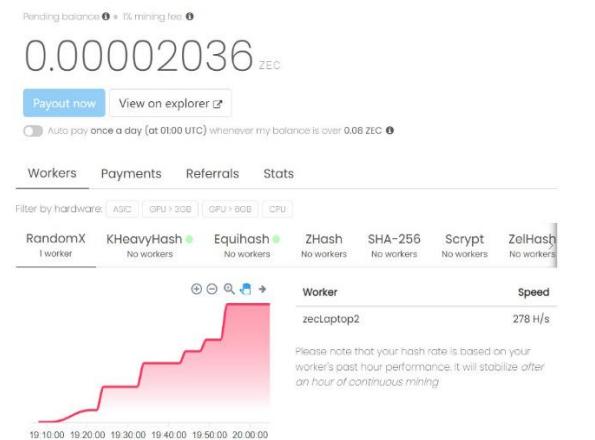


Figure 95 System 2 ZCash Result

```
miner speed 10s/60s/15m 349.2 367.4 404.3 H/s max 462.3 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884451 (60 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884452 (49 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884452 (115 tx)
miner speed 10s/60s/15m 414.3 403.5 H/s max 462.3 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884452 (138 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884452 (138 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884453 (18 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884453 (24 tx)
miner speed 10s/60s/15m 417.0 416.5 403.7 H/s max 462.3 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884453 (30 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884453 (32 tx)
miner speed 10s/60s/15m 417.8 413.8 403.5 H/s max 462.3 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884453 (40 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884453 (41 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884454 (29 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884455 (2 tx)
miner speed 10s/60s/15m 415.0 399.3 403.9 H/s max 462.3 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884455 (7 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884456 (6 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884456 (16 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884457 (8 tx)
miner speed 10s/60s/15m 416.7 413.9 403.8 H/s max 462.3 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884457 (12 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884457 (23 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884458 (4 tx)
miner speed 10s/60s/15m 412.0 392.2 402.3 H/s max 462.3 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884458 (13 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884458 (16 tx)
```

Figure 96 System 2 ZCash Mining Statistics

This was the result of ZCash (ZEC) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00000623 and after the mining session it had risen to the amount of 0.00002036. We can see the hash rate during this hour was 278H/s.

8.5.8 System 2 Dash XMRig

The second crypto mining tool that was used for this device was XMRig.

Here is the second device mining Dash (DASH) using the XMRig tool:

Analysis of System Performances

during Crypto Mining

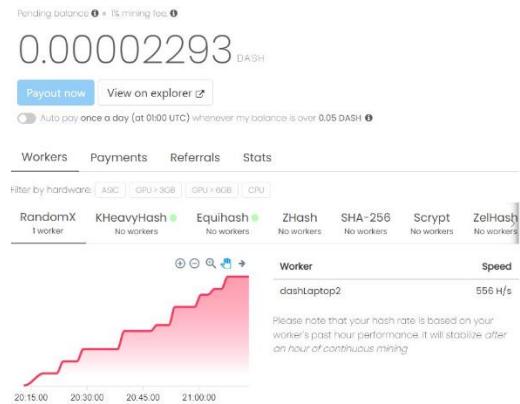


Figure 97 System 2 Dash Result

```
net miner new job from rx.unmineable.com:3333 diff I00001 algo rx/0 height 2884494 (37 tx)
net miner speed 10s/0s/15m 419.2 419.9 416.0 H/s max 461.9 H/s
net miner new job from rx.unmineable.com:3333 diff I00001 algo rx/0 height 2884494 (40 tx)
cpu accepted (19/0) diff I00001 (21 ms)
net miner new job from rx.unmineable.com:3333 diff I00001 algo rx/0 height 2884494 (48 tx)
net miner speed 10s/0s/15m 413.3 413.3 411.6 H/s max 461.9 H/s
net miner new job from rx.unmineable.com:3333 diff I00001 algo rx/0 height 2884494 (51 tx)
net miner new job from rx.unmineable.com:3333 diff I00001 algo rx/0 height 2884494 (56 tx)
net miner accepted (20/0) diff I00001 (21 ms)
net miner new job from rx.unmineable.com:3333 diff I00001 algo rx/0 height 2884494 (58 tx)
net miner speed 10s/0s/15m 417.7 418.8 412.2 H/s max 461.9 H/s
net miner new job from rx.unmineable.com:3333 diff I00001 algo rx/0 height 2884494 (62 tx)
net miner new job from rx.unmineable.com:3333 diff I00001 algo rx/0 height 2884494 (63 tx)
net miner new job from rx.unmineable.com:3333 diff I00001 algo rx/0 height 2884494 (76 tx)
net miner speed 10s/0s/15m 411.4 415.9 412.5 H/s max 461.9 H/s
net miner new job from rx.unmineable.com:3333 diff I00001 algo rx/0 height 2884494 (78 tx)
net miner new job from rx.unmineable.com:3333 diff I00001 algo rx/0 height 2884495 (2 tx)
net miner new job from rx.unmineable.com:3333 diff I00001 algo rx/0 height 2884495 (4 tx)
net miner speed 10s/0s/15m 415.8 415.8 412.5 H/s max 461.9 H/s
net miner new job from rx.unmineable.com:3333 diff I00001 algo rx/0 height 2884495 (7 tx)
cpu accepted (21/0) diff I00001 (21 ms)
net miner new job from rx.unmineable.com:3333 diff I00001 algo rx/0 height 2884496 (1 tx)
net miner new job from rx.unmineable.com:3333 diff I00001 algo rx/0 height 2884496 (15 tx)
net miner speed 10s/0s/15m 409.7 418.9 413.9 H/s max 461.9 H/s
net miner new job from rx.unmineable.com:3333 diff I00001 algo rx/0 height 2884497 (2 tx)
net miner new job from rx.unmineable.com:3333 diff I00001 algo rx/0 height 2884497 (14 tx)
net miner new job from rx.unmineable.com:3333 diff I00001 algo rx/0 height 2884497 (27 tx)
net miner speed 10s/0s/15m 416.4 416.2 414.0 H/s max 461.9 H/s
net miner new job from rx.unmineable.com:3333 diff I00001 algo rx/0 height 2884497 (42 tx)
```

Figure 98 System 2 Dash Mining Statistics

This was the result of Dash (DASH) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.000001322 and after the mining session it had risen to the amount of 0.00002293. We can see the effective hash rate during this hour was 556H/s.

8.5.9 System 3 Bitcoin XMRig

System 3	Packard Bell EasyNote TE69KB
CPU	AMD A4-5000 APU 1,500Mhz
RAM	8GB DDR3
GPU	AMD Radeon HD 8330
INTERNET	GIGABIT

The 1st crypto mining tool that was used for this device was XMRig.

Here is the third device mining Bitcoin (BTC) using the XMRig tool:

Analysis of System Performances

during Crypto Mining

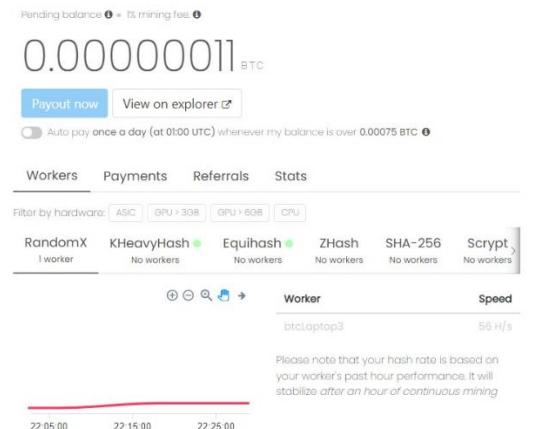


Figure 99 System 3 Bitcoin Result

```
miner speed 10s/60s/15m 82.68 83.73 83.60 H/s max 100.3 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884540 (26 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884540 (28 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884541 (28 tx)
miner speed 10s/60s/15m 86.54 84.08 83.14 H/s max 100.3 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884541 (36 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884541 (43 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884541 (47 tx)
miner speed 10s/60s/15m 84.73 84.59 83.24 H/s max 100.3 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884541 (53 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884541 (59 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884541 (63 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884542 (4 tx)
miner speed 10s/60s/15m 79.39 82.14 83.29 H/s max 100.3 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884542 (10 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884543 (3 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884543 (21 tx)
miner speed 10s/60s/15m 86.44 83.61 83.80 H/s max 100.3 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884543 (24 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884543 (27 tx)
miner speed 10s/60s/15m 87.51 84.95 84.00 H/s max 100.3 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884543 (38 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884543 (38 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884543 (35 tx)
miner speed 10s/60s/15m 85.92 87.02 84.30 H/s max 100.3 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884544 (2 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884544 (10 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2884544 (16 tx)
miner speed 10s/60s/15m 64.99 85.59 83.21 H/s max 100.3 H/s
```

Figure 100 System 3 Bitcoin Mining Statistics

This was the result of Bitcoin (BTC) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was up to 0.00000011 from the previous machine and after the mining session it had not changed and remained at 0.00000011. We can see the hash rate during this hour was 56H/s.

8.6.0 System 3 Ethereum XMRig

The 2nd crypto mining tool that was used for this device was XMRig.

Here is the third device mining Ethereum (ETH) using the XMRig tool:

Analysis of System Performances

during Crypto Mining



Figure 101 System 3 Ethereum Result

```
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885246 (33 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885246 (39 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885247 (3 tx)
net dev donate started
net new job from donate.ssl.xmrig.com:443 diff 1000K algo rx/0 height 2885247 (3 tx)
miner speed 10s/60s/15m 83.72 82.02 91.85 H/s max 102.8 H/s
net new job from rx.unmineable.com:3333 diff 1000K algo rx/0 height 2885247 (5 tx)
net new job from rx.unmineable.com:3333 diff 1000K algo rx/0 height 2885247 (7 tx)
net new job from rx.unmineable.com:3333 diff 1000K algo rx/0 height 2885247 (8 tx)
net new job from rx.unmineable.com:3333 diff 1000K algo rx/0 height 2885247 (13 tx)
net new job from rx.unmineable.com:3333 diff 1000K algo rx/0 height 2885247 (21 tx)
net dev donate finished
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885247 (15 tx)
miner speed 10s/60s/15m 84.23 83.70 91.15 H/s max 102.8 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885247 (23 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885247 (29 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885247 (32 tx)
miner speed 10s/60s/15m 84.81 83.98 90.37 H/s max 102.8 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885247 (36 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885247 (42 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885247 (45 tx)
miner speed 10s/60s/15m 82.78 83.58 89.71 H/s max 102.8 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885247 (47 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885247 (52 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885247 (53 tx)
miner speed 10s/60s/15m 81.66 80.41 88.84 H/s max 102.8 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885248 (52 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885248 (55 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885248 (57 tx)
```

Figure 102 System 3 Ethereum Mining Statistics

This was the result of Ethereum (ETH) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00000104 and after the mining session it had increased to 0.00000115. We can see the hash rate during this hour was 167H/s.

8.6.1 System 3 Litecoin

The 3rd crypto mining tool that was used for this device was XMRig.

Here is the third device mining Litecoin (LTC) using the XMRig tool:

Analysis of System Performances

during Crypto Mining

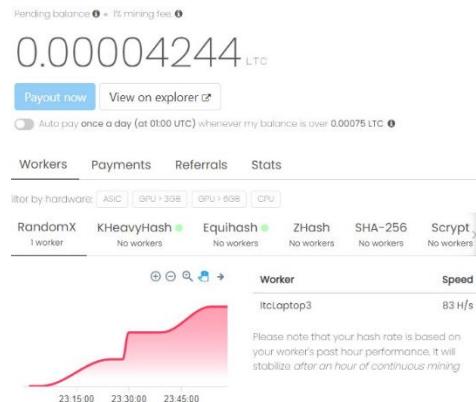


Figure 103 System 3 Litecoin Result

```
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885277 (21 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885278 (6 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885278 (10 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885278 (11 tx)
miner speed 10s/60s/15m 95.52 94.28 93.46 H/s max 100.2 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885278 (19 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885278 (22 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885278 (30 tx)
miner speed 10s/60s/15m 94.58 94.09 93.81 H/s max 100.2 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885278 (32 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885279 (2 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885279 (5 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885280 (5 tx)
miner speed 10s/60s/15m 95.86 95.83 94.44 H/s max 100.2 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885281 (2 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885281 (5 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885282 (1 tx)
miner speed 10s/60s/15m 95.57 95.05 94.49 H/s max 100.2 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885282 (7 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885282 (10 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885282 (15 tx)
miner speed 10s/60s/15m 88.48 93.98 94.45 H/s max 100.2 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885282 (17 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885282 (20 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885282 (25 tx)
miner speed 10s/60s/15m 75.78 93.66 94.71 H/s max 100.2 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885283 (25 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885283 (34 tx)
```

Figure 104 System 3 Litecoin Mining Statistics

This was the result of Litecoin (LTC) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00004020 and after the mining session it had increased to 0.00004244. We can see the effective hash rate during this hour was 83H/s.

8.6.2 System 3 ZCash

The 4th crypto mining tool that was used for this device was XMRig.

Here is the third device mining ZCash (ZEC) using the XMRig tool:

Analysis of System Performances

during Crypto Mining

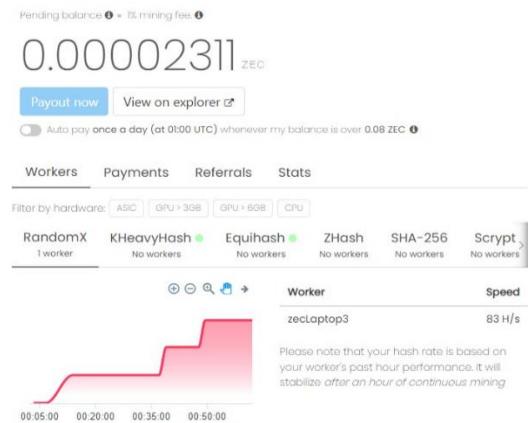


Figure 105 System 3 ZCash Result

```
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885308 (38 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885308 (41 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885308 (44 tx)
miner  speed 10s/60s/15m 95.34.93.18.93.00 H/s max 100.2 H/s
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885308 (47 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885308 (49 tx)
miner  speed 10s/60s/15m 91.79.37.75.92.54 H/s max 100.2 H/s
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885308 (49 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885308 (51 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885308 (52 tx)
miner  speed 10s/60s/15m 91.58.37.68.92.59 H/s max 100.2 H/s
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885308 (53 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885308 (56 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885309 (1 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885309 (2 tx)
miner  speed 10s/60s/15m 90.97.31.92.47 H/s max 100.2 H/s
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885309 (7 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885310 (2 tx)
cpu   accepted (5/s) 100001 (25 ms)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885310 (8 tx)
miner  speed 10s/60s/15m 89.95.98.45.92.31 H/s max 100.2 H/s
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885310 (13 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885310 (19 tx)
miner  speed 10s/60s/15m 91.96.92.13.91.95 H/s max 100.2 H/s
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885310 (23 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885310 (29 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885310 (32 tx)
miner  speed 10s/60s/15m 68.62.79.28.90.98 H/s max 100.2 H/s
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885310 (34 tx)
```

Figure 106 System 3 Ethereum Mining Statistics

This was the result of ZCash (ZEC) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00002036 and after the mining session it had increased to 0.00002311. We can see the effective hash rate during this hour was 83H/s.

8.6.3 System 3 Dash

The second crypto mining tool that was used for this device was XMRig.

Here is the third device mining Dash (DASH) using the XMRig tool:

Analysis of System Performances

during Crypto Mining

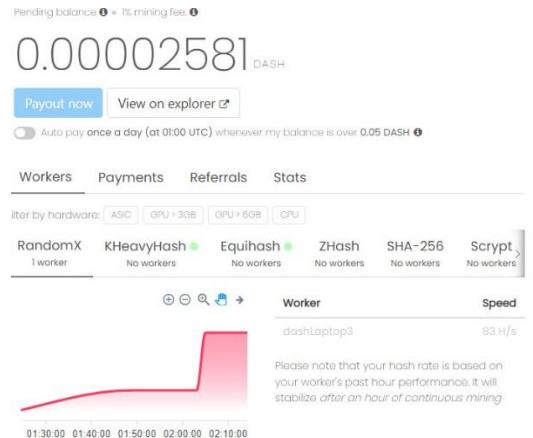


Figure 107 System 3 Dash Result

```
net new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885348 (184 tx)
net new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885348 (106 tx)
net new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885349 (2 tx)
miner speed 19s/69s/15m 87.97 H/s max 190.8 H/s
net new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885349 (6 tx)
net new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885349 (8 tx)
net new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885349 (10 tx)
miner speed 19s/69s/15m 96.79 H/s max 190.8 H/s
net new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885349 (11 tx)
net new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885349 (12 tx)
miner speed 19s/69s/15m 97.19 H/s max 190.8 H/s
net new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885349 (14 tx)
net new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885350 (1 tx)
net new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885350 (3 tx)
miner speed 19s/69s/15m 93.45 H/s max 190.8 H/s
net new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885350 (9 tx)
net new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885350 (19 tx)
net new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885350 (27 tx)
miner speed 19s/69s/15m 93.72 H/s max 190.8 H/s
net new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885350 (31 tx)
net new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885350 (31 tx)
net new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885350 (34 tx)
miner speed 19s/69s/15m 92.16 H/s max 190.8 H/s
net new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885350 (36 tx)
net new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885350 (42 tx)
net new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885350 (43 tx)
miner speed 19s/69s/15m 95.63 H/s max 190.8 H/s
net new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885350 (44 tx)
net new_job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2885350 (49 tx)
```

Figure 108 System 3 Dash Mining Statistics

This was the result of Dash (DASH) being mined by the CPU on this device during the set one-hour timeframe. The balance prior to mining was 0.00002293 and after the mining session it had not changed and remained at 0.00002581. We can see the hash rate during this hour was 83H/s.

8.7.0 System 4 Bitcoin XMRig

System 4	Custom Built PC (DESKTOP-17ILC2K)
CPU	AMD Ryzen 7 3700X 8 Cores, 3600Mhz, 16 Processors
RAM	16GB 3200Mhz DDR4
GPU	AMD Radeon™ RX 6700 XT Graphics Card
Broadband	Gigabyte Ethernet LAN (1000MB/s)
Power Supply	Corsair RM850x (850Watts)

When it comes to XMRig, System 4 was set to start mining Bitcoin first for an hour straight. Here is it performed and all the results within that hour.

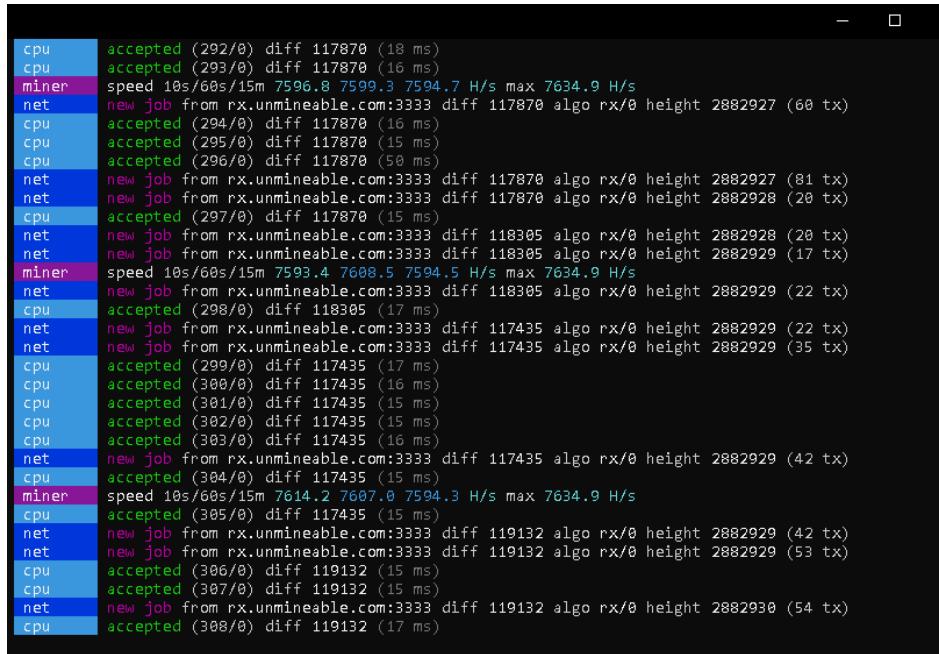


Figure 109 System 4 Bitcoin Result

Analysis of System Performances

during Crypto Mining

System 4 while mining Bitcoin with XMRig managed to mine up to 0.00000006 BTC. It displays 0.00000022 as it continued from where the previous mining process stopped at.



```
cpu accepted (292/0) diff 117870 (18 ms)
cpu accepted (293/0) diff 117870 (16 ms)
miner speed 10s/60s/15m 7596.8 7599.3 7594.7 H/s max 7634.9 H/s
net new job from rx.unmineable.com:3333 diff 117870 algo rx/0 height 2882927 (60 tx)
cpu accepted (294/0) diff 117870 (16 ms)
cpu accepted (295/0) diff 117870 (15 ms)
cpu accepted (296/0) diff 117870 (50 ms)
net new job from rx.unmineable.com:3333 diff 117870 algo rx/0 height 2882927 (81 tx)
net new job from rx.unmineable.com:3333 diff 117870 algo rx/0 height 2882928 (20 tx)
cpu accepted (297/0) diff 117870 (15 ms)
net new job from rx.unmineable.com:3333 diff 118305 algo rx/0 height 2882928 (20 tx)
net new job from rx.unmineable.com:3333 diff 118305 algo rx/0 height 2882929 (17 tx)
miner speed 10s/60s/15m 7593.4 7608.5 7594.5 H/s max 7634.9 H/s
net new job from rx.unmineable.com:3333 diff 118305 algo rx/0 height 2882929 (22 tx)
cpu accepted (298/0) diff 118305 (17 ms)
net new job from rx.unmineable.com:3333 diff 117435 algo rx/0 height 2882929 (22 tx)
net new job from rx.unmineable.com:3333 diff 117435 algo rx/0 height 2882929 (35 tx)
cpu accepted (299/0) diff 117435 (17 ms)
cpu accepted (300/0) diff 117435 (16 ms)
cpu accepted (301/0) diff 117435 (15 ms)
cpu accepted (302/0) diff 117435 (15 ms)
cpu accepted (303/0) diff 117435 (16 ms)
net new job from rx.unmineable.com:3333 diff 117435 algo rx/0 height 2882929 (42 tx)
cpu accepted (304/0) diff 117435 (15 ms)
miner speed 10s/60s/15m 7614.2 7607.8 7594.3 H/s max 7634.9 H/s
cpu accepted (305/0) diff 117435 (15 ms)
net new job from rx.unmineable.com:3333 diff 119132 algo rx/0 height 2882929 (42 tx)
net new job from rx.unmineable.com:3333 diff 119132 algo rx/0 height 2882929 (53 tx)
cpu accepted (306/0) diff 119132 (15 ms)
cpu accepted (307/0) diff 119132 (15 ms)
net new job from rx.unmineable.com:3333 diff 119132 algo rx/0 height 2882930 (54 tx)
cpu accepted (308/0) diff 119132 (17 ms)
```

Figure 110 System 4 Bitcoin Mining Statistics

Here is the result on how well System 4 performed while mining Bitcoin for one hour. In the “cpu” section labelled to the left it shows that the CPU has been accepted and is ready to mine, it also shows that the network had a handshake with the Bitcoin mining pool and finally it shows at what hash rate the system was mining at which in this case the max hash rate was 7634.9 H/s.

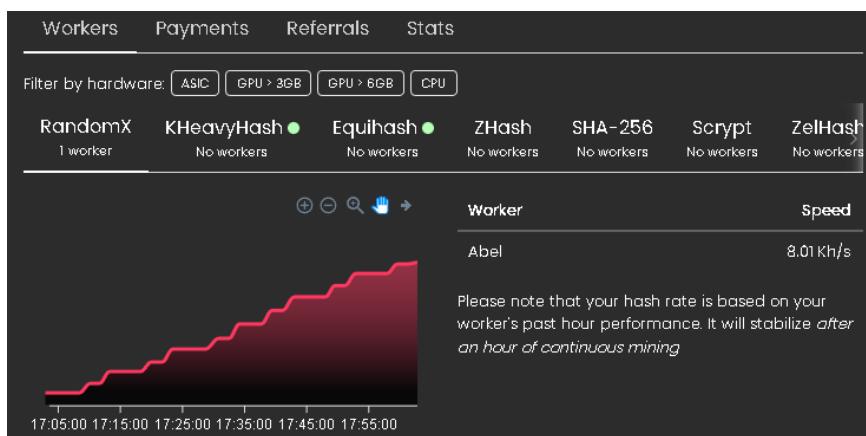


Figure 111 System 4 Bitcoin Graph

Here is also the graph that displays the mining process and also the hash rate. In this image it shows 8.01Kh/s which is translated to 8010 H/s.

Analysis of System Performances

Using Genetic Minimisation

8.7.1 System 4 Ethereum XMRig

After Bitcoin was completed and mined, the System was then set to mine Ethereum also for another hour and see the differences in results.

0.00000492_{ETH}

Figure 112 System 4 Ethereum Result

Overall, System 4 managed to mine 0.000000265 Ethereum. The final Ethereum mining process brought it up to 0.000000227 and it continued from there.

```
cpu accepted (240/0) diff 118727 (15 ms)
cpu accepted (251/0) diff 118727 (15 ms)
miner speed 10/69/15m 753.0 M/s max 7560.5 M/s
net new job from rx.unmineable.com:3333 diff 118727 algo rx/0 height 2082984 (138 tx)
cpu accepted (242/0) diff 118727 (15 ms)
cpu accepted (243/0) diff 118727 (15 ms)
cpu accepted (244/0) diff 118727 (15 ms)
cpu accepted (245/0) diff 118727 (15 ms)
net new job from rx.unmineable.com:3333 diff 118727 algo rx/0 height 2082984 (138 tx)
cpu accepted (246/0) diff 118727 (15 ms)
net new job from rx.unmineable.com:3333 diff 118727 algo rx/0 height 2082984 (138 tx)
cpu accepted (247/0) diff 118727 (15 ms)
net new job from rx.unmineable.com:3333 diff 118727 algo rx/0 height 2082985 (68 tx)
net new job from rx.unmineable.com:3333 diff 120842 algo rx/0 height 2082985 (68 tx)
net new job from rx.unmineable.com:3333 diff 120842 algo rx/0 height 2082985 (68 tx)
miner speed 10/69/15m 753.5 M/S max 7524.4 M/s max 7560.5 M/s
cpu accepted (250/0) diff 120842 (15 ms)
net new job from rx.unmineable.com:3333 diff 120842 algo rx/0 height 2082985 (79 tx)
cpu accepted (251/0) diff 120842 (15 ms)
net new job from rx.unmineable.com:3333 diff 120842 algo rx/0 height 2082985 (87 tx)
net new job from rx.unmineable.com:3333 diff 120842 algo rx/0 height 2082985 (87 tx)
miner speed 10/69/15m 753.5 M/S max 7524.1 M/s max 7560.5 M/s
cpu accepted (253/0) diff 120842 (15 ms)
net new job from rx.unmineable.com:3333 diff 120842 algo rx/0 height 2082985 (100 tx)
cpu accepted (254/0) diff 120842 (15 ms)
cpu accepted (255/0) diff 120842 (15 ms)
net new job from rx.unmineable.com:3333 diff 120842 algo rx/0 height 2082986 (4 tx)
net new job from rx.unmineable.com:3333 diff 120842 algo rx/0 height 2082986 (11 tx)
miner speed 10/69/15m 754.0 M/S max 7522.7 M/s max 7560.5 M/s
cpu accepted (256/0) diff 120842 algo rx/0 height 2082986 (11 tx)
net new job from rx.unmineable.com:3333 diff 120842 algo rx/0 height 2082986 (21 tx)
cpu accepted (257/0) diff 120839 (15 ms)
cpu accepted (258/0) diff 120839 (15 ms)
net new job from rx.unmineable.com:3333 diff 120839 algo rx/0 height 2082986 (31 tx)
net accepted (259/0) diff 120839 (15 ms)
net new job from rx.unmineable.com:3333 diff 120839 algo rx/0 height 2082986 (31 tx)
net new job from rx.unmineable.com:3333 diff 120839 algo rx/0 height 2082986 (38 tx)
miner speed 10/69/15m 7515.0 M/S max 7522.2 M/s max 7560.5 M/s
cpu accepted (260/0) diff 120842 algo rx/0 height 2082986 (45 tx)
cpu accepted (262/0) diff 120842 (7 ms)
net new job from rx.unmineable.com:3333 diff 120839 algo rx/0 height 2082986 (45 tx)
cpu accepted (263/0) diff 120839 (5 ms)
net new job from rx.unmineable.com:3333 diff 120839 algo rx/0 height 2082986 (48 tx)
cpu accepted (265/0) diff 120839 (5 ms)
net new job from rx.unmineable.com:3333 diff 120839 algo rx/0 height 2082987 (1 tx)
miner speed 10/69/15m 7515.0 M/S max 7522.2 M/s max 7560.5 M/s
cpu accepted (266/0) diff 119837 (5 ms)
net new job from rx.unmineable.com:3333 diff 119837 algo rx/0 height 2082987 (1 tx)
net new job from rx.unmineable.com:3333 diff 119837 algo rx/0 height 2082987 (11 tx)
cpu accepted (268/0) diff 119837 (5 ms)
cpu accepted (269/0) diff 119837 (5 ms)
net new job from rx.unmineable.com:3333 diff 119837 algo rx/0 height 2082987 (3 tx)
net new job from rx.unmineable.com:3333 diff 119837 algo rx/0 height 2082988 (17 tx)
miner speed 10/69/15m 7510.3 M/S max 7522.1 M/s max 7560.5 M/s
cpu accepted (270/0) diff 119837 algo rx/0 height 2082988 (31 tx)
cpu accepted (271/0) diff 119837 algo rx/0 height 2082988 (31 tx)
cpu accepted (272/0) diff 119837 (16 ms)
cpu accepted (273/0) diff 119837 (16 ms)
```

Figure 113 System 4 Ethereum Mining Statistics

This is the result of how well System 4 performed in 1 hour of Ethereum mining. The CPU section on the left shows that the CPU has been accepted and is ready for mining. It also shows that the network has done a handshake with the Ethereum mining pool and shows the last hash rate the system was mining. In this case the maximum hash rate was 7560.5 H/s.

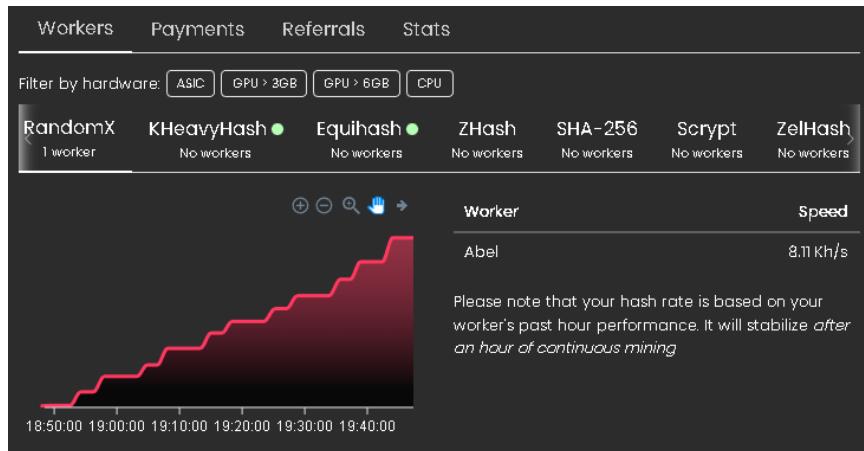


Figure 114 System 4 Ethereum Graph

Here is also a graph showing the mining process and hash rate. This image shows 8.11 Kh/s, which corresponds to 8110 H/s.

8.7.2 System 4 Dash XMRig

After Ethereum was completed and mined, the system was set to mine Dash for another hour and examined the difference in results.



Figure 115 System 4 Dash Result

For Dash coin, System 4 was able to mine 0.00039060 Dash within the time of 1 hour exactly. Before the mining began Dash was at 0.00006722 Dash, this shows that the System has mined much more than previous tests.

Analysis of System Performances during Crypto Mining

```

[cpu] accepted (236/0) diff 118980 (14 ms)
[miner] speed 109685/15m 2553.1 7527.1 7510.2 H/s max 7563.3 H/s
[net] new job from rx.unmineable.com:3333 diff 118980 algo rx/0 height 2888816 (21 tx)
[net] new job from rx.unmineable.com:3333 diff 118980 algo rx/0 height 2888816 (4 tx)
[net] new job from rx.unmineable.com:3333 diff 118980 algo rx/0 height 2888816 (13 tx)
[net] new job from rx.unmineable.com:3333 diff 118942 algo rx/0 height 2888816 (13 tx)
[cpu] accepted (237/0) diff 118942 (16 ms)
[miner] speed 109685/15m 2553.1 7527.1 7510.5 7510.6 H/s max 7563.3 H/s
[net] new job from rx.unmineable.com:3333 diff 118942 algo rx/0 height 2888816 (25 tx)
[cpu] accepted (238/0) diff 118942 (14 ms)
[miner] accepted (239/0) diff 118942 (14 ms)
[cpu] accepted (239/0) diff 118942 (14 ms)
[cpu] speed 109685/15m 2553.1 7510.5 7510.6 H/s max 7563.3 H/s
[miner] speed 109685/15m 2553.1 7510.5 7510.6 H/s max 7563.3 H/s
[net] new job from rx.unmineable.com:3333 diff 118942 algo rx/0 height 2888816 (34 tx)
[cpu] accepted (240/0) diff 118942 (15 ms)
[miner] accepted (241/0) diff 118942 (15 ms)
[cpu] accepted (242/0) diff 118942 (17 ms)
[miner] accepted (243/0) diff 118942 (17 ms)
[net] new job from rx.unmineable.com:3333 diff 118942 algo rx/0 height 2888816 (48 tx)
[net] new job from rx.unmineable.com:3333 diff 118951 algo rx/0 height 2888816 (49 tx)
[miner] speed 109685/15m 2553.1 7454.7 7500.0 H/s max 7563.3 H/s
[cpu] accepted (244/0) diff 118951 (16 ms)
[miner] accepted (245/0) diff 118951 (16 ms)
[net] new job from rx.unmineable.com:3333 diff 118951 algo rx/0 height 2888816 (65 tx)
[net] new job from rx.unmineable.com:3333 diff 118951 algo rx/0 height 2888816 (65 tx)
[miner] speed 109685/15m 2553.1 7505.5 7506.0 H/s max 7563.3 H/s
[cpu] accepted (246/0) diff 118942 (16 ms)
[net] new job from rx.unmineable.com:3333 diff 118942 algo rx/0 height 2888816 (79 tx)
[net] new job from rx.unmineable.com:3333 diff 117435 algo rx/0 height 2888816 (79 tx)
[cpu] accepted (247/0) diff 117435 (16 ms)
[miner] accepted (248/0) diff 117435 (16 ms)
[net] new job from rx.unmineable.com:3333 diff 117435 algo rx/0 height 2888816 (90 tx)
[cpu] accepted (249/0) diff 117435 (17 ms)
[miner] speed 109685/15m 2547.7 7536.0 7509.3 H/s max 7563.3 H/s
[net] new job from rx.unmineable.com:3333 diff 117435 algo rx/0 height 2888816 (93 tx)
[cpu] accepted (250/0) diff 117435 (16 ms)
[net] new job from rx.unmineable.com:3333 diff 117932 algo rx/0 height 2888816 (93 tx)
[cpu] accepted (251/0) diff 117932 (15 ms)
[miner] accepted (252/0) diff 117932 (15 ms)
[cpu] accepted (253/0) diff 117932 (15 ms)
[cpu] accepted (254/0) diff 117932 (16 ms)
[net] new job from rx.unmineable.com:3333 diff 117932 algo rx/0 height 2888816 (94 tx)
[cpu] accepted (255/0) diff 117932 (14 ms)
[miner] accepted (256/0) diff 117932 (14 ms)
[net] new job from rx.unmineable.com:3333 diff 117932 algo rx/0 height 2888816 (95 tx)
[net] new job from rx.unmineable.com:3333 diff 117932 algo rx/0 height 2888816 (95 tx)
[miner] speed 109685/15m 2550.2 7539.0 7509.0 H/s max 7563.3 H/s
[cpu] accepted (257/0) diff 119400 (15 ms)
[net] new job from rx.unmineable.com:3333 diff 119400 algo rx/0 height 2888816 (102 tx)
[cpu] accepted (258/0) diff 119400 (15 ms)
[cpu] accepted (259/0) diff 119400 (15 ms)
[cpu] accepted (260/0) diff 119400 (15 ms)
[cpu] accepted (261/0) diff 119400 (15 ms)
[net] new job from rx.unmineable.com:3333 diff 119400 algo rx/0 height 2888816 (102 tx)
[cpu] accepted (262/0) diff 119400 (327 ms)
[cpu] accepted (263/0) diff 119400 (16 ms)
[miner] accepted (264/0) diff 119400 (16 ms)
[net] new job from rx.unmineable.com:3333 diff 121860 algo rx/0 height 2888816 (102 tx)
[cpu] accepted (265/0) diff 121860 (16 ms)
[net] new job from rx.unmineable.com:3333 diff 121860 algo rx/0 height 2888816 (102 tx)
[miner] speed 109685/15m 2564.4 7512.5 7513.3 H/s max 7563.3 H/s

```

Figure 116 System 4 Dash Mining Statistics

This is the performance result of System 4 in 1 hour of Dash mining. The CPU pane on the left shows that the CPU has been accepted and is ready for mining. It also shows that the network has performed a handshake with the Dash mining pool, and the last hash rate that the system mined. In this case the maximum hash rate was 7563.3 H/s.

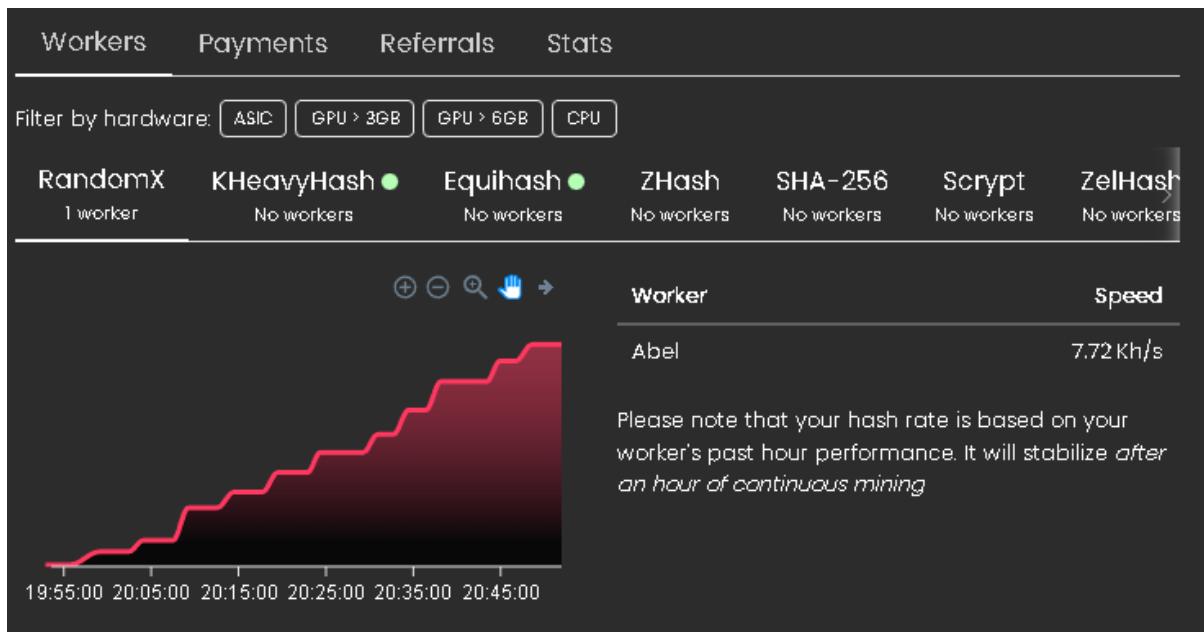


Figure 117 System 4 Dash Graph

In this graph it makes it easier to understand what is going on. It mainly highlights the hash rate of the mining process, which in this case the system mind at 7.72Kh/s which translates to 7720H/s.

Analysis of System Performances during Crypto Mining

8.7.3 System 4 ZCash XMRig

In this section it will display on how System 4 performed while mining ZCash for an hour without any interruptions.



Figure 118 System 4 ZCash Result

System 4 managed to mine 0.00046156 ZCash in the space of 1 hour. Before this mining process started it was already mined at 0.00002728 ZCash from the previous systems.

```
accepted (226/0) diff 109231 (0 ms)
net new job from rx.unmineable.com:33333 diff 109221 algo rx/0 height 2083054 (38 tx)
cpu accepted (227/0) diff 109231 (0 ms)
net new job from rx.unmineable.com:33333 diff 109221 algo rx/0 height 2083054 (44 tx)
cpu accepted (229/0) diff 109231 (0 ms)
net speed 10/0/0/159 7540.2 H/s max 7564.2 H/s
cpu accepted (230/0) diff 109231 (0 ms)
net new job from rx.unmineable.com:33333 diff 109221 algo rx/0 height 2083054 (48 tx)
net new job from rx.unmineable.com:33333 diff 109221 algo rx/0 height 2083054 (49 tx)
net new job from rx.unmineable.com:33333 diff 109221 algo rx/0 height 2083055 (1 tx)
net new job from rx.unmineable.com:33333 diff 109225 algo rx/0 height 2083055 (8 tx)
cpu accepted (231/0) diff 109725 (0 ms)
net new job from rx.unmineable.com:33333 diff 109726 algo rx/0 height 2083055 (9 tx)
net new job from rx.unmineable.com:33333 diff 109876 algo rx/0 height 2083055 (16 tx)
cpu accepted (232/0) diff 109876 (0 ms)
net speed 10/0/0/159 7540.2 H/s max 7564.2 H/s
net new job from rx.unmineable.com:33333 diff 109876 algo rx/0 height 2083055 (22 tx)
net new job from rx.unmineable.com:33333 diff 109775 algo rx/0 height 2083055 (22 tx)
net new job from rx.unmineable.com:33333 diff 109775 algo rx/0 height 2083055 (24 tx)
net new job from rx.unmineable.com:33333 diff 109775 algo rx/0 height 2083055 (24 tx)
net new job from rx.unmineable.com:33333 diff 109775 algo rx/0 height 2083055 (28 tx)
miner speed 10/0/0/159 7561.6 7516.0 7495.3 H/s max 7564.2 H/s
cpu accepted (233/0) diff 109775 (0 ms)
net new job from rx.unmineable.com:33333 diff 109775 algo rx/0 height 2083055 (36 tx)
net new job from rx.unmineable.com:33333 diff 109732 algo rx/0 height 2083055 (36 tx)
cpu accepted (234/0) diff 109732 (0 ms)
net new job from rx.unmineable.com:33333 diff 109732 algo rx/0 height 2083055 (40 tx)
cpu accepted (237/0) diff 107312 (0 ms)
net new job from rx.unmineable.com:33333 diff 107312 algo rx/0 height 2083055 (49 tx)
cpu accepted (238/0) diff 107312 (0 ms)
net new job from rx.unmineable.com:33333 diff 107312 algo rx/0 height 2083055 (51 tx)
cpu accepted (239/0) diff 107312 (0 ms)
net speed 10/0/0/159 7540.2 H/s max 7564.2 H/s
net new job from rx.unmineable.com:33333 diff 107312 algo rx/0 height 2083055 (46 tx)
net new job from rx.unmineable.com:33333 diff 108692 algo rx/0 height 2083055 (48 tx)
cpu accepted (240/0) diff 108692 (0 ms)
net new job from rx.unmineable.com:33333 diff 108692 algo rx/0 height 2083055 (50 tx)
net new job from rx.unmineable.com:33333 diff 108692 algo rx/0 height 2083055 (51 tx)
cpu accepted (243/0) diff 108692 (17 ms)
net new job from rx.unmineable.com:33333 diff 108692 algo rx/0 height 2083055 (57 tx)
net new job from rx.unmineable.com:33333 diff 108692 algo rx/0 height 2083055 (57 tx)
cpu accepted (245/0) diff 108692 (17 ms)
net new job from rx.unmineable.com:33333 diff 108692 algo rx/0 height 2083055 (62 tx)
cpu accepted (249/0) diff 109156 (15 ms)
net new job from rx.unmineable.com:33333 diff 109156 algo rx/0 height 2083055 (69 tx)
net new job from rx.unmineable.com:33333 diff 109156 algo rx/0 height 2083055 (69 tx)
cpu accepted (246/0) diff 108248 (66 ms)
net new job from rx.unmineable.com:33333 diff 108248 algo rx/0 height 2083055 (69 tx)
cpu accepted (247/0) diff 108248 (66 ms)
net new job from rx.unmineable.com:33333 diff 108248 algo rx/0 height 2083055 (77 tx)
cpu accepted (248/0) diff 108248 (66 ms)
miner speed 10/0/0/159 7540.2 7520.4 7494.9 H/s max 7564.2 H/s
cpu accepted (249/0) diff 108248 (0 ms)
cpu accepted (249/0) diff 108248 (0 ms)
net new job from rx.unmineable.com:33333 diff 108248 algo rx/0 height 2083055 (82 tx)
net new job from rx.unmineable.com:33333 diff 109142 algo rx/0 height 2083055 (82 tx)
net new job from rx.unmineable.com:33333 diff 109142 algo rx/0 height 2083056 (3 tx)
net new job from rx.unmineable.com:33333 diff 109142 algo rx/0 height 2083056 (9 tx)
miner speed 10/0/0/159 722.9 7404.7 7485.3 H/s max 7564.2 H/s
net new job from rx.unmineable.com:33333 diff 108248 algo rx/0 height 2083056 (9 tx)
```

Figure 119 System 4 ZCash Mining Statistics

Here are System 4 performance results for 1 hour of ZCash mining. The CPU pane on the left shows that the CPU has been accepted and is ready for mining. It also shows that the network has performed a handshake with his ZCash mining pool and displays the last hash rate the system mined. In this case the maximum hash rate was 7564.2 H/s.

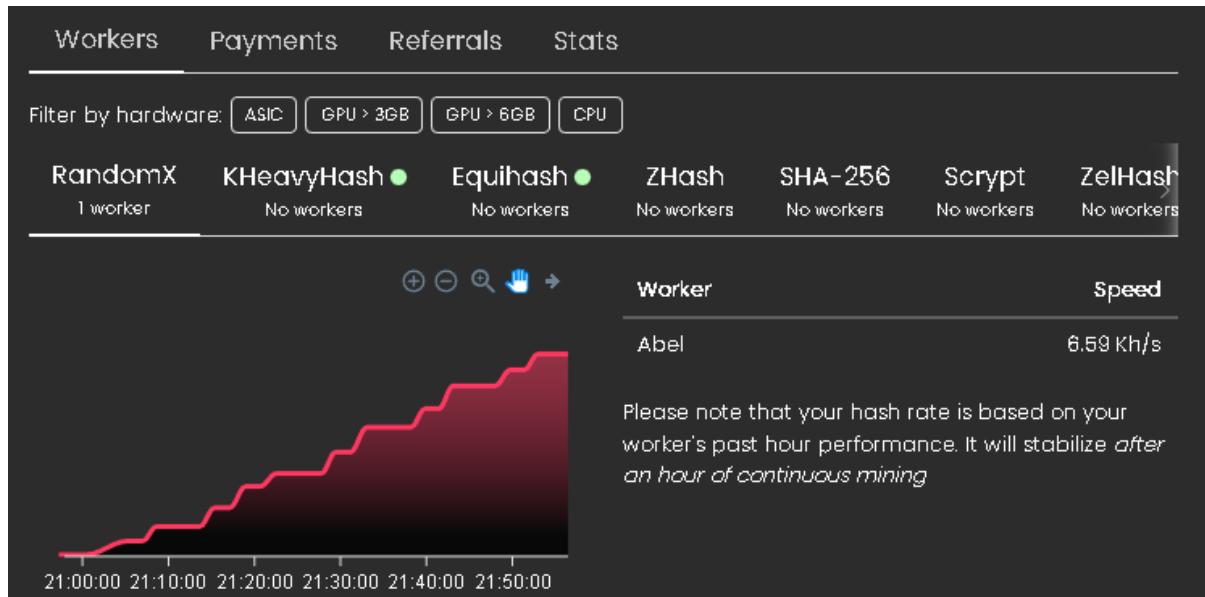


Figure 120 System 4 ZCash Graph

Here is the final graph that shows the stats simpler for anyone who has difficulties understanding command prompt text. It displays that the system was mining ZCash at a speed of 6.59Kh/s which means it was mining at a hash rate of 6590H/s.

8.7.4 System 4 Litecoin XMRig

This was the final coin that System 4 has mined, here are the final results from System 4.



Figure 121 System 4 Litecoin Result

System 4 was capable of mining 0.00005247 Litecoin within the time of one hour. The previous systems mined up to 0.00001809 Litecoin and that's where it stopped.

Analysis of System Performances

during Crypto Mining

```

CPU accepted (223/0) diff 111496 (15 ms)
CPU accepted (224/0) diff 111496 (15 ms)
set new job from rx.uminneable.com:3333 diff 112516 algo rx/0 height: 2883087 (39 tx)
CPU accepted (225/0) diff 112516 (15 ms)
miner speed 101/68s/15m 7516.2 7516.0 7499.6 H/s max 7552.4 H/s
set new job from rx.uminneable.com:3333 diff 112985 algo rx/0 height: 2883087 (69 tx)
CPU accepted (226/0) diff 112985 (15 ms)
CPU accepted (227/0) diff 112985 (15 ms)
set new job from rx.uminneable.com:3333 diff 112516 algo rx/0 height: 2883087 (58 tx)
set new job from rx.uminneable.com:3333 diff 112985 algo rx/0 height: 2883087 (58 tx)
set new job from rx.uminneable.com:3333 diff 112985 algo rx/0 height: 2883087 (66 tx)
CPU accepted (228/0) diff 112985 (15 ms)
CPU accepted (229/0) diff 112985 (15 ms)
set new job from rx.uminneable.com:3333 diff 112501 algo rx/0 height: 2883087 (81 tx)
CPU accepted (230/0) diff 112501 (15 ms)
CPU accepted (231/0) diff 112501 (15 ms)
set new job from rx.uminneable.com:3333 diff 112501 algo rx/0 height: 2883087 (81 tx)
CPU accepted (232/0) diff 112501 (16 ms)
CPU accepted (233/0) diff 112501 (15 ms)
set new job from rx.uminneable.com:3333 diff 112501 algo rx/0 height: 2883087 (81 tx)
CPU accepted (234/0) diff 112501 (15 ms)
miner speed 101/68s/15m 7497.3 7516.0 7498.6 H/s max 7552.4 H/s
set new job from rx.uminneable.com:3333 diff 112995 algo rx/0 height: 2883087 (81 tx)
set new job from rx.uminneable.com:3333 diff 112995 algo rx/0 height: 2883087 (85 tx)
CPU accepted (235/0) diff 112995 (15 ms)
CPU accepted (236/0) diff 112995 (15 ms)
set new job from rx.uminneable.com:3333 diff 112995 algo rx/0 height: 2883087 (93 tx)
CPU accepted (238/0) diff 112995 (16 ms)
CPU accepted (239/0) diff 112995 (17 ms)
set new job from rx.uminneable.com:3333 diff 112995 algo rx/0 height: 2883087 (100 tx)
CPU accepted (240/0) diff 112995 (16 ms)
CPU accepted (241/0) diff 112995 (16 ms)
set new job from rx.uminneable.com:3333 diff 112995 algo rx/0 height: 2883087 (105 tx)
CPU accepted (242/0) diff 112995 (15 ms)
CPU accepted (243/0) diff 112995 (15 ms)
CPU accepted (244/0) diff 112995 (16 ms)
set new job from rx.uminneable.com:3333 diff 115412 algo rx/0 height: 2883087 (105 tx)
set new job from rx.uminneable.com:3333 diff 115412 algo rx/0 height: 2883087 (109 tx)
CPU accepted (247/0) diff 115412 (16 ms)
set new job from rx.uminneable.com:3333 diff 115412 algo rx/0 height: 2883087 (114 tx)
CPU accepted (248/0) diff 115412 (15 ms)
set new job from rx.uminneable.com:3333 diff 115412 algo rx/0 height: 2883087 (122 tx)
CPU accepted (249/0) diff 115412 (15 ms)
set new job from rx.uminneable.com:3333 diff 115412 algo rx/0 height: 2883087 (127 tx)
CPU accepted (250/0) diff 115412 (21 ms)
set new job from rx.uminneable.com:3333 diff 114938 algo rx/0 height: 2883087 (127 tx)
CPU accepted (251/0) diff 114938 (15 ms)
set new job from rx.uminneable.com:3333 diff 114938 algo rx/0 height: 2883087 (132 tx)
set new job from rx.uminneable.com:3333 diff 114938 algo rx/0 height: 2883087 (135 tx)
CPU accepted (253/0) diff 114938 (15 ms)
CPU accepted (254/0) diff 114938 (15 ms)
set new job from rx.uminneable.com:3333 diff 115412 algo rx/0 height: 2883087 (135 tx)
set new job from rx.uminneable.com:3333 diff 115412 algo rx/0 height: 2883087 (140 tx)

```

Figure 122 System 4 Litecoin Mining Statistics

Here are the System 4 performance results for 1 hour of Litecoin mining. The CPU pane on the left shows that the CPU has been accepted and is ready for mining. It also shows that the network has performed a handshake with his Litecoin mining pool and displays the last hash rate the system mined. In this case the maximum hash rate was 7552H/s.

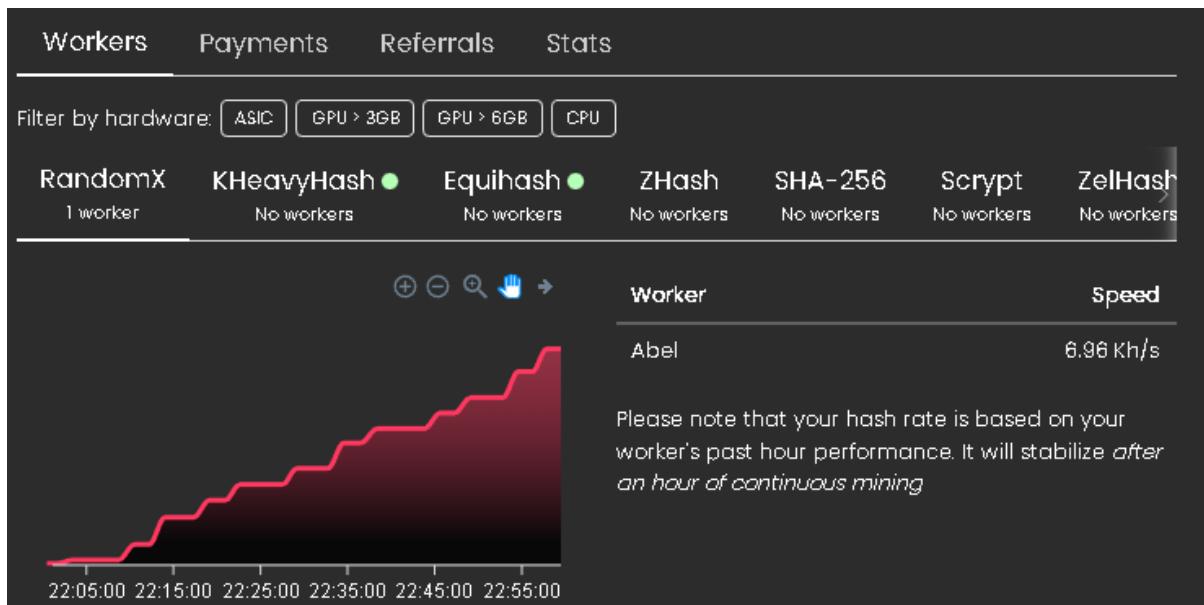


Figure 123 System 4 Litecoin Graph

This is the final figure to make the stats easier to understand for those who have difficulty understanding the prompt text. This indicated that the system was mining his Litecoin at his rate of 6.96 Kh/s. This means we were mining at a hash rate of 6960 H/s.

8.7.5 System 5 Bitcoin XMRig

System 5	Asus ROG Strix G15 G513IH-HN036T
CPU	AMD Ryzen 5 4600H
RAM	8GB DDR4 3200MHz SDRAM (2 x 4GB)
GPU	NVIDIA GeForce GTX 1650Ti 4GB GDDR6 VRAM
Broadband	Gigabyte Ethernet LAN (1000MB/s)
Power Supply	200W AC Adapter

Bitcoin is the first cryptocurrency that System 5 has started with mining for an hour. Here are all the results that have been recorded throughout the mining process.

0.00000023 BTC

Figure 124 System 5 Bitcoin Result

Over the past hour, System 5 was only able to mine 0.00000001 BTC. The mining began when there was already 0.00000022 BTC mined from the previous mining processes. This is because bitcoin is the most popular cryptocurrency and is constantly mined from all around the world.

```
miner speed 10s/60s/15m 374.5 375.9 374.5 H/s max 381.0 H/s
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883640 (48 tx)
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883641 (5 tx)
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883642 (1 tx)
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883642 (8 tx)
miner speed 10s/60s/15m 376.8 376.3 376.8 H/s max 381.0 H/s
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883642 (15 tx)
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883642 (23 tx)
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883643 (1 tx)
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883644 (3 tx)
miner speed 10s/60s/15m 378.3 375.9 374.6 H/s max 381.0 H/s
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883644 (4 tx)
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883644 (13 tx)
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883644 (19 tx)
miner speed 10s/60s/15m 394.5 374.5 374.5 H/s max 381.0 H/s
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883644 (28 tx)
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883644 (32 tx)
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883644 (39 tx)
miner speed 10s/60s/15m 375.1 374.6 H/s max 381.0 H/s
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883644 (57 tx)
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883644 (63 tx)
miner speed 10s/60s/15m 366.1 371.9 374.4 H/s max 381.0 H/s
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883645 (1 tx)
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883645 (9 tx)
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883645 (15 tx)
miner accepted (100001) diff 100001
miner speed 10s/60s/15m 377.4 372.0 374.1 H/s max 381.0 H/s
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883645 (21 tx)
miner accepted (11/0) diff 100001 (20 ms)
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883645 (26 tx)
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883645 (27 tx)
miner speed 10s/60s/15m 376.3 374.3 374.1 H/s max 381.0 H/s
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883645 (31 tx)
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883645 (36 tx)
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883645 (40 tx)
miner speed 10s/60s/15m 361.4 373.9 373.9 H/s max 381.0 H/s
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883645 (44 tx)
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883645 (47 tx)
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883645 (53 tx)
miner speed 10s/60s/15m 374.5 376.1 373.9 H/s max 381.0 H/s
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883645 (62 tx)
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883645 (74 tx)
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883646 (5 tx)
miner speed 10s/60s/15m 271.1 225.6 364.8 H/s max 381.0 H/s
net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883646 (25 tx)
```

Figure 125 System 5 Bitcoin Mining Statistics

These are the System 5's mining results for an hour of mining Bitcoin. The CPU has been approved and is ready for mining, according to the CPU pane on the left. Additionally, it displays the last hash rate that the system mined and shows that the network executed a handshake with his Bitcoin mining pool. The max hash rate in this instance was 381H/s.

Analysis of System Performances

during Crypto Mining

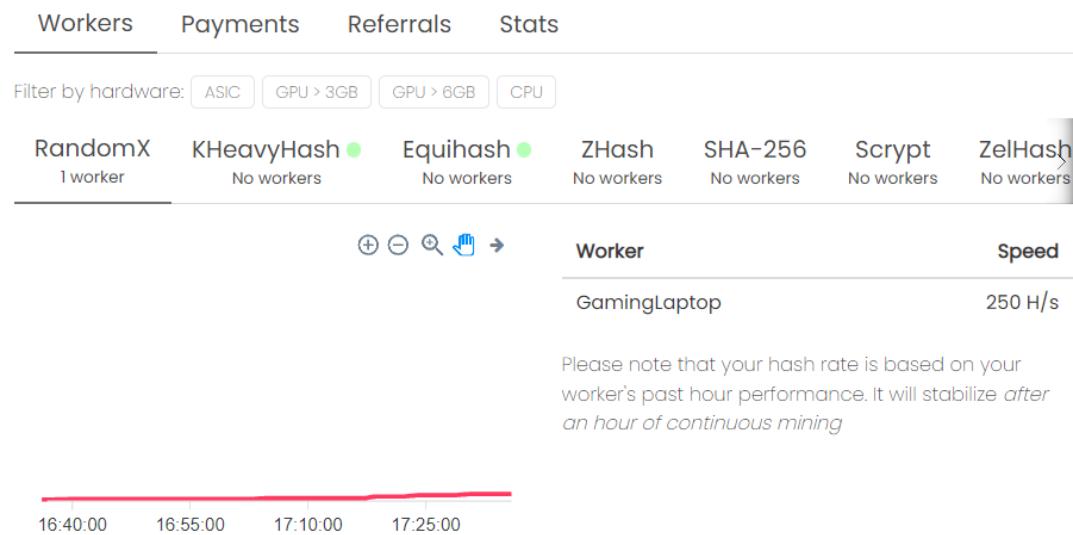


Figure 126 System 5 Bitcoin Graph

Here is a quick graph showing what hash rate the system was mining at towards the end of the mining process.

8.7.6 System 5 Ethereum XMRig

Ethereum was the second cryptocurrency that was mined with System5. Here are all the results in which were displayed throughout the mining process.

0.00000535 ETH

Figure 127 System 5 Ethereum Result

System 5 managed to mine up to 0.00000043 ETH within the hour that was planned. Before System 5 start mining for Ethereum it was already mined at 0.00000492 Ethereum by the other systems.

Analysis of System Performances

during Crypto Mining

```

cpu accepted (249/0) diff 118727 (55 ms)
cpu accepted (241/0) diff 118727 (56 ms)
miners speed 10/60s/15m 7516.6 7531.0 7523.9 H/s max 7560.5 H/s
net new job from rx.umineable.com:3333 diff 118727 algo rx/0 height 2882984 (138 tx)
cpu accepted (243/0) diff 118727 (55 ms)
cpu accepted (244/0) diff 118727 (55 ms)
cpu accepted (245/0) diff 118727 (55 ms)
net new job from rx.umineable.com:3333 diff 118727 algo rx/0 height 2882984 (138 tx)
cpu accepted (246/0) diff 118727 (56 ms)
net new job from rx.umineable.com:3333 diff 118727 algo rx/0 height 2882984 (138 tx)
cpu accepted (247/0) diff 118727 (55 ms)
cpu accepted (248/0) diff 118727 (55 ms)
net new job from rx.umineable.com:3333 diff 118727 algo rx/0 height 2882985 (68 tx)
net new job from rx.umineable.com:3333 diff 118042 algo rx/0 height 2882985 (68 tx)
cpu accepted (249/0) diff 118042 (56 ms)
miners speed 10/60s/15m 7537.5 7535.3 7524.4 H/s max 7560.5 H/s
net accepted (250/0) diff 118042 (56 ms)
net new job from rx.umineable.com:3333 diff 120842 algo rx/0 height 2882985 (79 tx)
cpu accepted (251/0) diff 120842 (56 ms)
net new job from rx.umineable.com:3333 diff 120842 algo rx/0 height 2882985 (87 tx)
net new job from rx.umineable.com:3333 diff 120842 algo rx/0 height 2882985 (96 tx)
cpu accepted (252/0) diff 120842 (56 ms)
miners speed 10/60s/15m 7535.5 7524.6 7524.1 H/s max 7560.5 H/s
net accepted (253/0) diff 120842 (56 ms)
net new job from rx.umineable.com:3333 diff 120842 algo rx/0 height 2882985 (108 tx)
cpu accepted (254/0) diff 120842 (56 ms)
cpu accepted (255/0) diff 120842 (55 ms)
net new job from rx.umineable.com:3333 diff 120842 algo rx/0 height 2882986 (4 tx)
cpu accepted (256/0) diff 120842 (56 ms)
net new job from rx.umineable.com:3333 diff 120842 algo rx/0 height 2882986 (11 tx)
net new job from rx.umineable.com:3333 diff 120842 algo rx/0 height 2882986 (11 tx)
miners speed 10/60s/15m 7548.6 7522.4 7523.7 H/s max 7560.5 H/s
net new job from rx.umineable.com:3333 diff 120842 algo rx/0 height 2882986 (11 tx)
net new job from rx.umineable.com:3333 diff 120338 algo rx/0 height 2882986 (21 tx)
cpu accepted (257/0) diff 120338 (56 ms)
cpu accepted (258/0) diff 120338 (56 ms)
net new job from rx.umineable.com:3333 diff 120338 algo rx/0 height 2882986 (31 tx)
accepted (259/0) diff 120338 (56 ms)
net new job from rx.umineable.com:3333 diff 120842 algo rx/0 height 2882986 (31 tx)
net new job from rx.umineable.com:3333 diff 120842 algo rx/0 height 2882986 (38 tx)
miners speed 10/60s/15m 7515.0 7560.7 7522.2 H/s max 7560.5 H/s
accepted (260/0) diff 120842 (56 ms)
net new job from rx.umineable.com:3333 diff 120842 algo rx/0 height 2882986 (45 tx)
cpu accepted (261/0) diff 120842 (56 ms)
net new job from rx.umineable.com:3333 diff 120338 algo rx/0 height 2882986 (45 tx)
net new job from rx.umineable.com:3333 diff 120338 algo rx/0 height 2882986 (46 tx)
accepted (262/0) diff 120338 (56 ms)
net new job from rx.umineable.com:3333 diff 120338 algo rx/0 height 2882987 (1 tx)
cpu accepted (263/0) diff 120338 (56 ms)
net new job from rx.umineable.com:3333 diff 120842 algo rx/0 height 2882987 (1 tx)
cpu accepted (264/0) diff 119837 (56 ms)
net new job from rx.umineable.com:3333 diff 119837 algo rx/0 height 2882987 (1 tx)
cpu accepted (265/0) diff 119837 (56 ms)
net new job from rx.umineable.com:3333 diff 119837 algo rx/0 height 2882988 (17 tx)
miners speed 10/60s/15m 7530.3 7527.4 7522.1 H/s max 7560.5 H/s
net new job from rx.umineable.com:3333 diff 119837 algo rx/0 height 2882988 (31 tx)
cpu accepted (266/0) diff 119837 (56 ms)
cpu accepted (267/0) diff 119837 (56 ms)

```

Figure 128 System 5 Ethereum Mining Statistics

These are the mining results for one hour of Ethereum mining for the System 5. The CPU pane on the left indicates that the CPU has been certified and is prepared for mining. It also reveals the system's most recent hash rate and evidence of a handshake between the network and his Ethereum mining pool. In this case, the maximum hash rate was 7560.5H/s.

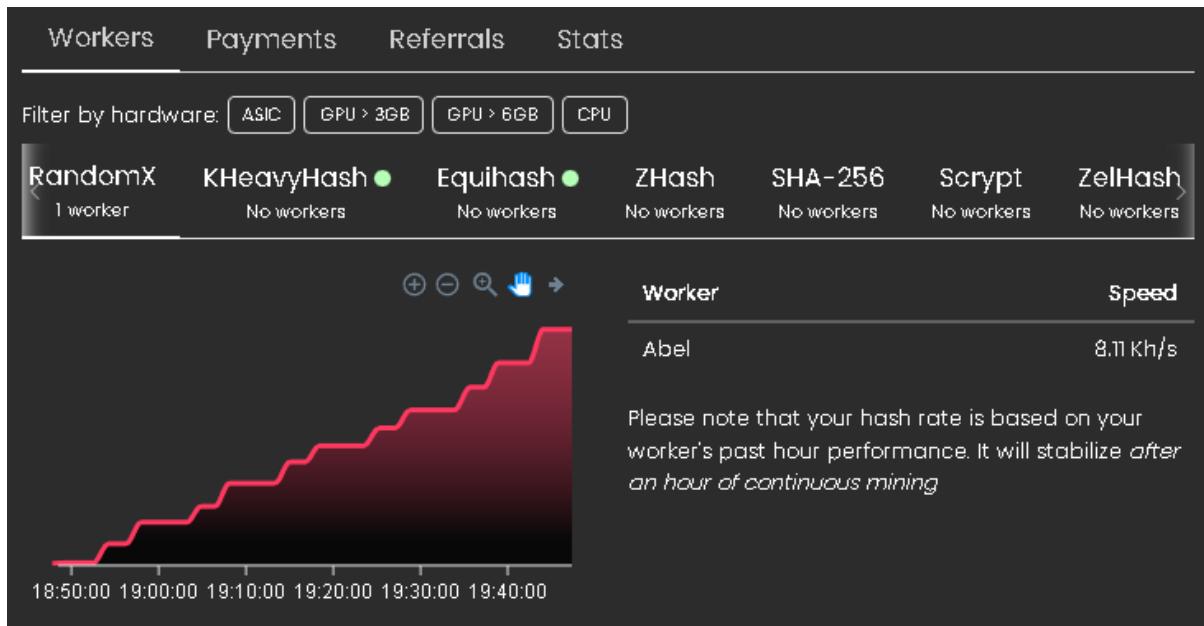


Figure 129 System 5 Ethereum Graph

Here is a quick graph showing what hash rate the system was mining at towards the end of the mining process.

8.7.7 System 5 Dash XMRig

Dash coin was the 3rd cryptocurrency that System5 has mined for one hour consistently. Here are all the recorded data and statistics from the mining process.

0.00057005 DASH

Figure 130 System 5 Dash Result

When the 1 hour was completed, it looked like System5 was able to mine 0.00000939 Dash coin.

Before the mining began the current balance was already set to be at 0.00056066 from the previous mining processes.

The screenshot shows the XMRig 6.19.2 mining interface. The left pane displays mining statistics for the CPU, showing various hash rates and accepted blocks. The right pane shows the current balance and mining progress for Dash. The total balance is 0.00057005 DASH, and the mining progress bar indicates the completion of a 1-hour mining session.

```

XMRig 6.19.2
[2023-05-11 21:44:50.040] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883774 (25 tx)
[2023-05-11 21:45:12.106] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883774 (42 tx)
[2023-05-11 21:45:32.790] miner speed 10s/60s/15m 1063.9 1057.3 1058.8 H/s max 1069.9 H/s
[2023-05-11 21:45:34.293] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883774 (53 tx)
[2023-05-11 21:45:56.293] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883774 (57 tx)
[2023-05-11 21:46:01.481] gpu accepted (34/6) diff 100001 (16 ms)
[2023-05-11 21:46:09.163] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883775 (1 tx)
[2023-05-11 21:46:16.208] net accepted (35/6) diff 100001 (18 ms)
[2023-05-11 21:46:30.083] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883775 (8 tx)
[2023-05-11 21:46:33.981] miner speed 10s/60s/15m 1063.2 1063.6 1058.8 H/s max 1069.9 H/s
[2023-05-11 21:46:48.411] net accepted (36/6) diff 100001 (19 ms)
[2023-05-11 21:46:52.171] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883775 (8 tx)
[2023-05-11 21:47:14.068] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883775 (16 tx)
[2023-05-11 21:47:35.065] miner speed 10s/60s/15m 1063.8 1062.7 1059.2 H/s max 1069.9 H/s
[2023-05-11 21:47:36.016] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883775 (18 tx)
[2023-05-11 21:47:58.023] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883775 (23 tx)
[2023-05-11 21:48:00.009] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883775 (27 tx)
[2023-05-11 21:48:18.031] miner speed 10s/60s/15m 1063.3 1063.5 1059.5 H/s max 1069.9 H/s
[2023-05-11 21:48:42.173] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883775 (38 tx)
[2023-05-11 21:48:52.298] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883776 (1 tx)
[2023-05-11 21:49:13.137] gpu accepted (37/6) diff 100001 (17 ms)
[2023-05-11 21:49:13.906] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883776 (3 tx)
[2023-05-11 21:49:36.176] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883776 (11 tx)
[2023-05-11 21:49:37.405] miner speed 10s/60s/15m 1062.9 1062.7 1059.7 H/s max 1069.9 H/s
[2023-05-11 21:49:49.521] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883777 (8 tx)
[2023-05-11 21:50:10.074] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883777 (21 tx)
[2023-05-11 21:50:29.998] gpu accepted (39/6) diff 100001 (18 ms)
[2023-05-11 21:50:38.111] miner speed 10s/60s/15m 1062.3 1062.3 1059.5 H/s max 1069.9 H/s
[2023-05-11 21:50:38.546] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883777 (43 tx)
[2023-05-11 21:51:16.234] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883777 (59 tx)
[2023-05-11 21:51:38.236] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883777 (56 tx)
[2023-05-11 21:51:39.728] miner speed 10s/60s/15m 1063.3 1063.7 1059.8 H/s max 1069.9 H/s
[2023-05-11 21:52:00.316] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883777 (63 tx)
[2023-05-11 21:52:22.333] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883777 (64 tx)
[2023-05-11 21:52:40.908] miner speed 10s/60s/15m 1062.5 1063.9 1061.1 H/s max 1069.9 H/s
[2023-05-11 21:53:06.375] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883777 (72 tx)
[2023-05-11 21:53:06.375] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883777 (75 tx)
[2023-05-11 21:53:25.625] gpu accepted (39/6) diff 100001 (19 ms)
[2023-05-11 21:53:28.447] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883777 (78 tx)
[2023-05-11 21:53:42.024] miner speed 10s/60s/15m 1062.5 1056.6 1061.0 H/s max 1069.9 H/s
[2023-05-11 21:53:48.024] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883778 (3 tx)
[2023-05-11 21:54:09.991] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883778 (18 tx)
[2023-05-11 21:54:23.002] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883779 (14 tx)
[2023-05-11 21:54:23.231] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883780 (1 tx)
[2023-05-11 21:54:42.231] miner speed 10s/60s/15m 1061.9 1064.2 1061.1 H/s max 1069.9 H/s
[2023-05-11 21:55:08.058] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883780 (15 tx)
[2023-05-11 21:55:08.058] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883780 (24 tx)
[2023-05-11 21:55:30.149] net new job from rx.ummineable.com:3333 diff 100001 algo rx/0 height 2883780 (35 tx)

```

Figure 131 System 5 Dash Mining Statistics

These are the mining outcomes for the System 5 during an hour of mining Dash. The CPU has been approved and is ready for mining, according to the CPU pane on the left. The most recent hash rate of the system is also disclosed, along with proof of a handshake between his Dash mining pool and the network. The greatest hash rate in this instance was 1069.9H/s.

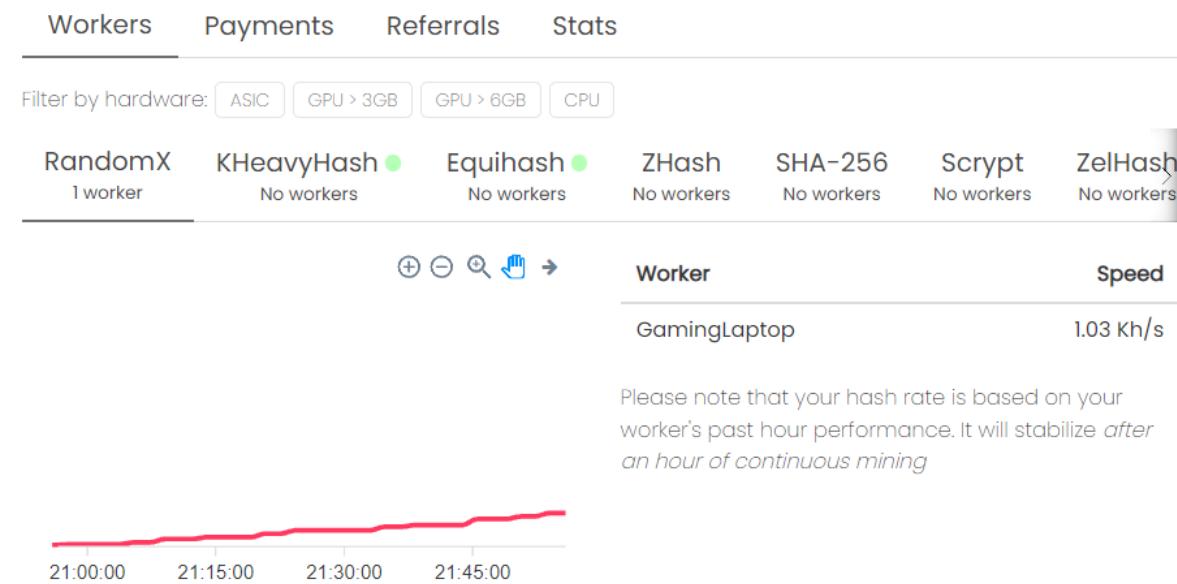


Figure 132 System 5 Dash Graph

In this graph it displays that when System 5 was mining it was mining at a hash rate of around 1.03Kh/s which is translated to 1030H/s.

8.7.8 System 5 ZCash XMRig

In this section it will display on how System 5 performed while it was running a mining tool in the background for one hour mining ZCash.

0.00056066 ZEC

Figure 133 System 5 ZCash Result

Throughout the hour spent while System 5 was mining ZCash, it managed to mine up to 0.00001931 ZCash. It displays 0.00056066 as the mining began from the previous system that stopped at 0.00054135.

Analysis of System Performances

during Crypto Mining

```
net new job from donate.ssl.xmrig.com:443 diff 1000K algo rx/0 height 2883564 (30 tx)
miner speed 10s/60s/15m 677.4 678.4 680.9 H/s max 684.1 H/s
net new job from donate.ssl.xmrig.com:443 diff 1000K algo rx/0 height 2883564 (33 tx)
net dev donate finished
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (30 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (37 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (43 tx)
miner speed 10s/60s/15m 682.3 682.4 681.0 H/s max 684.1 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (49 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (52 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (60 tx)
miner speed 10s/60s/15m 659.4 678.9 680.7 H/s max 684.1 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (67 tx)
cpu accepted (28/0) diff 100001 (17 ms)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (71 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (75 tx)
miner speed 10s/60s/15m 681.6 676.6 680.7 H/s max 684.1 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (78 tx)
cpu accepted (29/0) diff 100001 (17 ms)
cpu accepted (30/0) diff 100001 (16 ms)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (85 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (88 tx)
miner speed 10s/60s/15m 680.7 681.2 680.6 H/s max 684.1 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883565 (2 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883565 (7 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883565 (17 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883566 (7 tx)
miner speed 10s/60s/15m 681.0 669.2 679.7 H/s max 684.1 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883566 (31 tx)
```

Figure 134 System 5 ZCash Mining Statistics

These are the mining results for an hour of ZCash mining for the System 5. The CPU pane on the left indicates that the CPU has been certified and is prepared for mining. Additionally provided is the system's most recent hash rate and evidence of a handshake between his ZCash mining pool and the network. In this case, the highest hash rate was 684.1H/s.

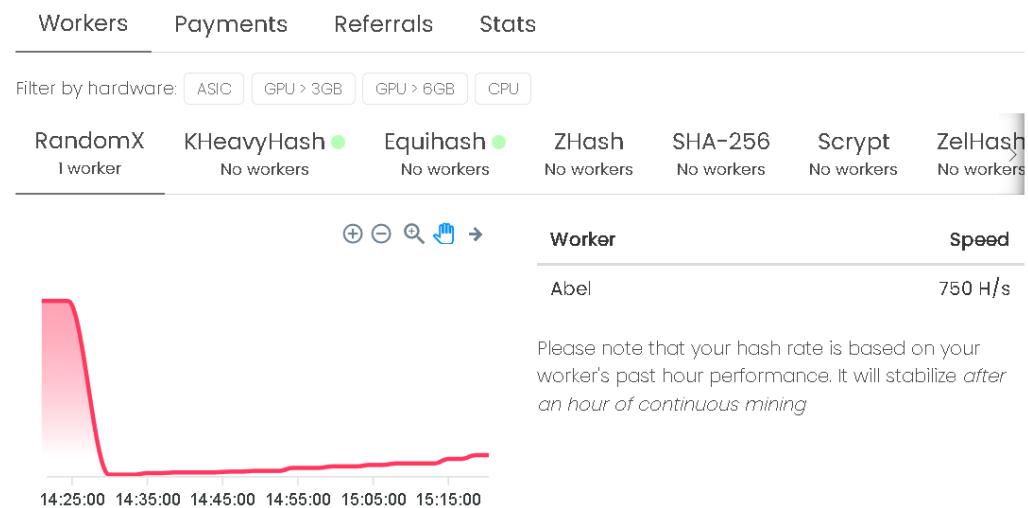


Figure 135 System 5 ZCash Graph

Also, in this graph it displays System 5's performance and what hash rate it was mining throughout the mining process, the hash rate was 1.03Kh/s which is translated to 1030H/s.

Analysis of System Performances during Crypto Mining

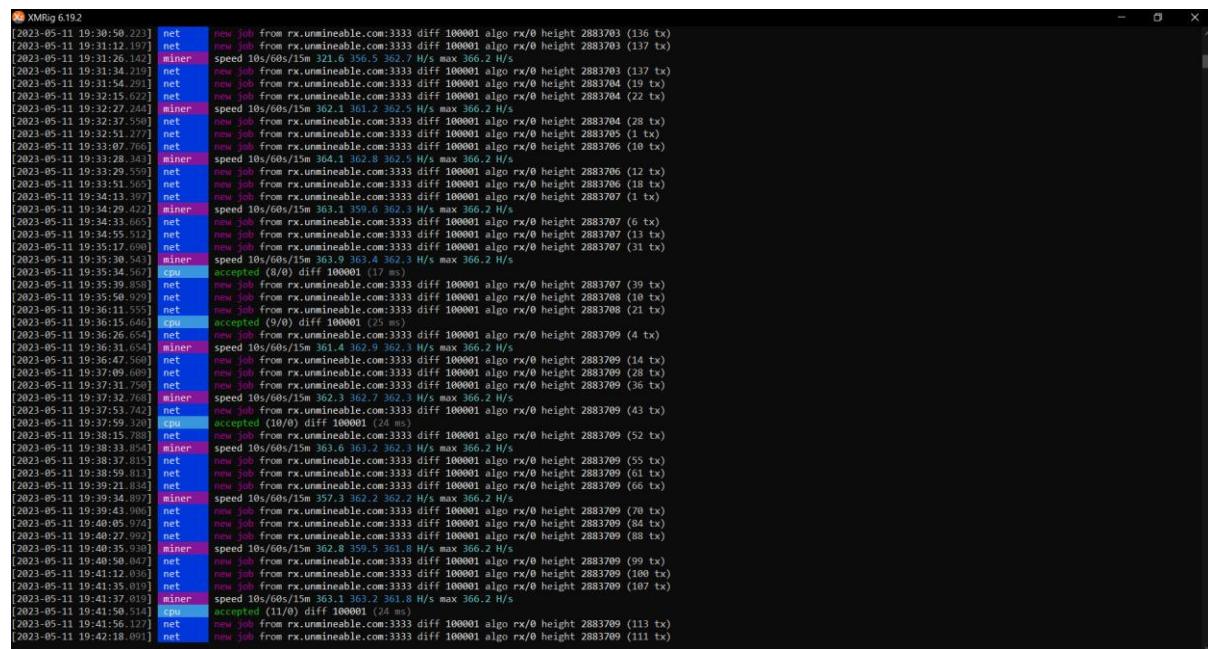
8.7.9 System 5 Litecoin XMRig

After System 5 finished mining with ZCash it was then set to start mining Litecoin for another hour, here are the results of the mining process of Litecoin.

0.00008195 LTC

Figure 136 System 5 Litecoin Result

While System 5 was running the mining process, after 1 hour it managed to find 0.00000262 Litecoin. The previous mining process stopped at exactly 0.00007933 Litecoin.



The screenshot shows the XMRig 6.19.2 mining interface with the Litecoin tab selected. The left pane displays mining statistics for the CPU, while the right pane shows the mining progress for Litecoin. The progress bar is nearly full, indicating the completion of the mining process.

```
[2023-05-11 19:30:50.223] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883703 (136 tx)
[2023-05-11 19:31:12.197] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883703 (137 tx)
[2023-05-11 19:31:26.142] miner speed 10s/60s/15s 321.6 356.5 362.7 H/s max 366.2 H/s
[2023-05-11 19:31:30.223] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883703 (137 tx)
[2023-05-11 19:31:34.223] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883704 (19 tx)
[2023-05-11 19:31:35.627] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883704 (23 tx)
[2023-05-11 19:32:15.627] miner speed 10s/60s/15s 362.1 362.5 H/s max 366.2 H/s
[2023-05-11 19:32:27.264] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883704 (28 tx)
[2023-05-11 19:32:37.590] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883704 (1 tx)
[2023-05-11 19:33:07.766] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883706 (19 tx)
[2023-05-11 19:33:28.343] miner speed 10s/60s/15s 364.1 362.5 H/s max 366.2 H/s
[2023-05-11 19:33:29.559] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883706 (12 tx)
[2023-05-11 19:34:02.545] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883706 (18 tx)
[2023-05-11 19:34:29.473] miner speed 10s/60s/15s 363.1 359.8 362.3 H/s max 366.2 H/s
[2023-05-11 19:34:33.605] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883707 (6 tx)
[2023-05-11 19:34:55.512] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883707 (13 tx)
[2023-05-11 19:35:17.690] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883707 (31 tx)
[2023-05-11 19:35:30.543] miner speed 10s/60s/15s 363.9 363.4 362.3 H/s max 366.2 H/s
[2023-05-11 19:35:34.507] cpu accepted (8/0) diff 100001 (1.7 ms)
[2023-05-11 19:35:39.858] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883707 (39 tx)
[2023-05-11 19:35:51.593] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883708 (18 tx)
[2023-05-11 19:35:53.593] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883708 (21 tx)
[2023-05-11 19:36:15.503] miner accepted (9/0) diff 100001 (1.7 ms)
[2023-05-11 19:36:26.554] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883709 (4 tx)
[2023-05-11 19:36:31.654] miner speed 10s/60s/15s 361.4 362.4 362.3 H/s max 366.2 H/s
[2023-05-11 19:36:47.560] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883709 (14 tx)
[2023-05-11 19:37:09.600] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883709 (28 tx)
[2023-05-11 19:37:31.750] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883709 (36 tx)
[2023-05-11 19:37:32.768] miner speed 10s/60s/15s 362.3 362.4 362.3 H/s max 366.2 H/s
[2023-05-11 19:37:53.742] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883709 (43 tx)
[2023-05-11 19:38:15.180] cpu accepted (10/0) diff 100001 (24 ms)
[2023-05-11 19:38:20.854] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883709 (52 tx)
[2023-05-11 19:38:33.854] miner speed 10s/60s/15s 363.1 362.3 362.3 H/s max 366.2 H/s
[2023-05-11 19:38:37.815] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883709 (55 tx)
[2023-05-11 19:38:59.813] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883709 (61 tx)
[2023-05-11 19:39:21.834] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883709 (66 tx)
[2023-05-11 19:39:43.897] miner speed 10s/60s/15s 357.3 362.2 362.2 H/s max 366.2 H/s
[2023-05-11 19:39:43.908] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883709 (70 tx)
[2023-05-11 19:40:05.974] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883709 (84 tx)
[2023-05-11 19:40:27.992] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883709 (88 tx)
[2023-05-11 19:40:38.938] miner speed 10s/60s/15s 362.8 359.5 361.8 H/s max 366.2 H/s
[2023-05-11 19:41:08.937] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883709 (99 tx)
[2023-05-11 19:41:12.036] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883709 (100 tx)
[2023-05-11 19:41:35.039] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883709 (107 tx)
[2023-05-11 19:41:37.019] miner speed 10s/60s/15s 363.1 363.2 361.8 H/s max 366.2 H/s
[2023-05-11 19:41:56.514] cpu accepted (11/0) diff 100001 (24 ms)
[2023-05-11 19:41:56.127] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883709 (113 tx)
[2023-05-11 19:42:18.001] net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883709 (111 tx)
```

Figure 137 System 5 Litecoin Mining Statistics

These are the mining results for the System 5 after an hour of mining Litecoin. The CPU has been approved and is ready for mining, according to the CPU pane on the left. The system's most recent hash rate and proof of a handshake between the network and his Litecoin mining pool are also provided. The greatest hash rate in this instance was 366.2H/s.

Analysis of System Performances

during Crypto Mining

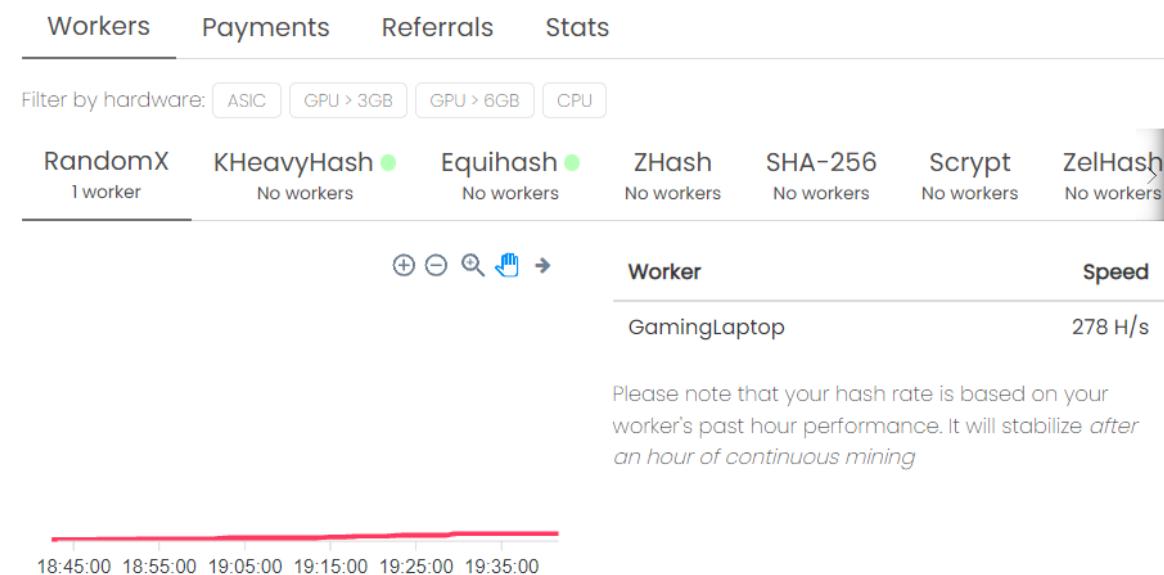


Figure 138 System 5 Litecoin Graph

This is the graph that may make it easier to understand of what is occurring throughout the mining process of Litecoin.

8.8.0 System 6 Bitcoin XMRig

System 6	AVITA NS14A6
CPU	AMG Ryzen 3 3300U
RAM	4GB 2400Mhz
Broadband	Gigabyte Ethernet LAN (1000MB/s)
Power Supply	120W AC Adapter

This is the first cryptocurrency that System 6 started the mining process. Below will be displayed a full in-depth statistic on how well the system performed throughout the one hour of mining.

0.00000022 BTC

Figure 139 System 6 Bitcoin Result

Here we can see that there was no change within the displayed balance, that means that the traffic of the cryptocurrency and also the system specification where not as powerful to even try mine at least 0.00000001 BTC.

Analysis of System Performances

during Crypto Mining

```
net      new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883142 (7 tx)
miner   speed 10s/60s/15m 659.0 658.2 658.8 H/s max 677.8 H/s
net      new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883142 (27 tx)
net      new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883142 (38 tx)
cpu     accepted (21/0) diff 100001 (18 ms)
net      new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883142 (47 tx)
miner   speed 10s/60s/15m 645.6 608.6 655.4 H/s max 677.8 H/s
net      new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883142 (62 tx)
net      new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883142 (65 tx)
miner   speed 10s/60s/15m 660.7 641.2 654.6 H/s max 677.8 H/s
net      new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883142 (66 tx)
net      new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883142 (71 tx)
net      new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883143 (3 tx)
miner   speed 10s/60s/15m 661.7 655.4 654.3 H/s max 677.8 H/s
net      new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883143 (9 tx)
net      new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883143 (14 tx)
net      new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883143 (21 tx)
miner   speed 10s/60s/15m 661.2 654.9 653.9 H/s max 677.8 H/s
net      new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883143 (26 tx)
net      new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883143 (27 tx)
cpu     accepted (22/0) diff 100001 (443 ms)
net      new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883143 (30 tx)
miner   speed 10s/60s/15m 662.5 658.6 654.0 H/s max 677.8 H/s
net      new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883143 (35 tx)
net      new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883143 (37 tx)
net      new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883143 (42 tx)
miner   speed 10s/60s/15m 660.7 660.1 654.0 H/s max 677.8 H/s
net      new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883144 (8 tx)
net      new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883144 (17 tx)
```

Figure 140 System 6 Bitcoin Mining Statistics

These are the System 6's mining results following an hour of Bitcoin mining. The CPU pane on the left indicates that the CPU has been certified and is prepared for mining. Additionally given are the system's most recent hash rate and evidence of a handshake between the network and his Bitcoin mining pool. In this case, the highest hash rate was 677.8H/s.

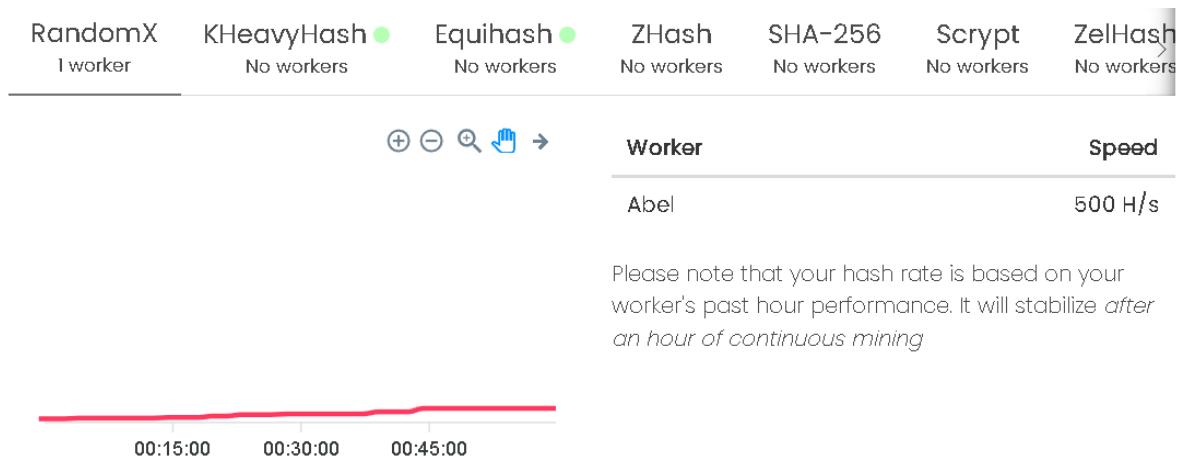


Figure 141 System 6 Bitcoin Graph

This graph might make it simpler to comprehend what is happening during the Bitcoin mining process within the hour of testing & mining.

8.8.1 System 6 Ethereum XMRig

Ethereum is the 2nd cryptocurrency that System 6 has mined for an hour. Here are the recorded results on how it performed.

0.00000516 ETH

Figure 142 System 6 Ethereum Result

As the hour passed, it showed that System 6 was able to mine 0.00000024 Ethereum within the space of one hour. The mining started at 0.00000492 as that was the result of System 4.

```

miner speed 10s/60s/15m 653.1 652.9 651.7 H/s max 655.9 H/s
miner new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883200 (48 tx)
miner new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883200 (48 tx)
miner new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883201 (8 tx)
miner new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883202 (3 tx)
miner speed 10s/60s/15m 653.5 653.5 651.7 H/s max 655.9 H/s
miner new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883202 (12 tx)
miner new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883202 (23 tx)
miner new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883202 (28 tx)
miner speed 10s/60s/15m 652.7 653.5 651.7 H/s max 655.9 H/s
cpu accepted (30/0) diff 100001 (16 ms)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883202 (36 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883202 (39 tx)
miner speed 10s/60s/15m 651.8 652.7 651.9 H/s max 655.9 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883202 (46 tx)
cpu accepted (31/0) diff 100001 (18 ms)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883202 (51 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883202 (58 tx)
miner speed 10s/60s/15m 653.4 653.5 652.0 H/s max 655.9 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883202 (64 tx)
cpu accepted (32/0) diff 100001 (17 ms)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883202 (69 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883202 (77 tx)
miner speed 10s/60s/15m 648.6 646.6 652.0 H/s max 655.9 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883202 (81 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883202 (85 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883202 (90 tx)
miner speed 10s/60s/15m 648.8 652.0 652.1 H/s max 655.9 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883202 (92 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883202 (95 tx)
miner speed 10s/60s/15m 640.7 648.6 651.8 H/s max 655.9 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883202 (98 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883202 (100 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883203 (5 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883204 (1 tx)
miner speed 10s/60s/15m 651.6 650.3 651.6 H/s max 655.9 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883204 (6 tx)
cpu accepted (33/0) diff 100001 (16 ms)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883204 (15 tx)

```

Figure 143 System 6 Ethereum Mining Statistics

These are the System 6's mining results following an hour of Ethereum mining. The CPU pane on the left indicates that the CPU has been certified and is prepared for mining. Additionally given are the system's most recent hash rate and evidence of a handshake between the network and his Ethereum mining pool. In this case, the highest hash rate was 655.9H/s.

Analysis of System Performances

during Crypto Mining

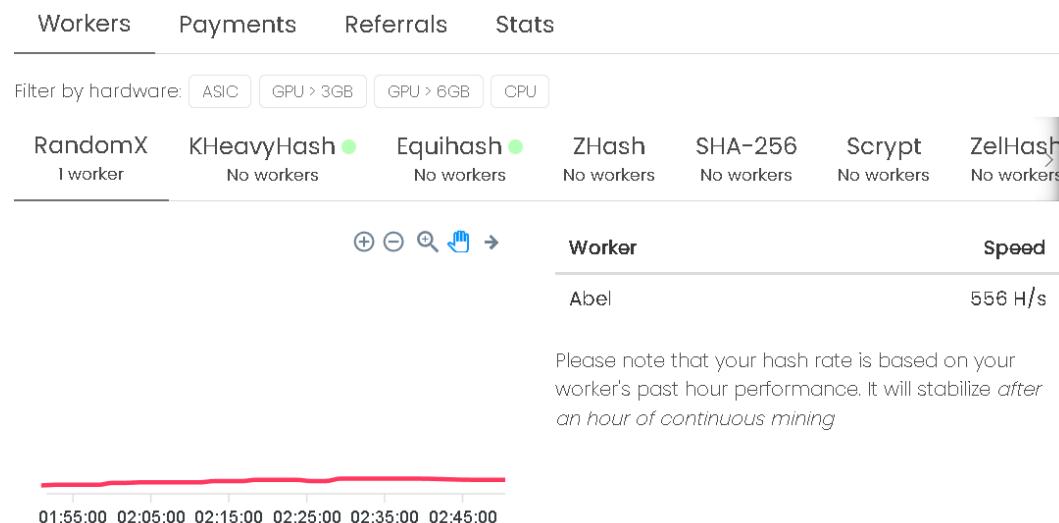


Figure 144 System 6 Ethereum Graph

This graph could help you better understand what's going on throughout the hour of testing and mining for Bitcoin.

8.8.2 System 6 Litecoin XMRig

After the mining process was fully complete, System 6 was then set to mine Litecoin for another hour and get a strongly accurate result.

0.00007933 LTC

Figure 145 System 6 Litecoin Result

Overall, System 6 managed to mine up to 0.00000877 Litecoin, this is because before the mining process started, the Litecoin balance was already at 0.00007056 Litecoin since the previous mining.

Analysis of System Performances during Crypto Mining

```
miner speed 10s/60s/15m 5.14 5.79 259.9 H/s max 659.6 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883241 (53 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883241 (59 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883242 (1 tx)
miner speed 10s/60s/15m 3.57 4.87 216.1 H/s max 659.6 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883242 (11 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883242 (12 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883242 (28 tx)
miner speed 10s/60s/15m 5.23 3.60 172.2 H/s max 659.6 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883242 (33 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883242 (35 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883242 (41 tx)
miner speed 10s/60s/15m 574.2 497.9 161.4 H/s max 659.6 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883242 (44 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883242 (46 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883243 (1 tx)
miner speed 10s/60s/15m 654.5 624.2 159.4 H/s max 659.6 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883243 (5 tx)
cpu accepted (25/0) diff 100001 (20 ms)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883243 (9 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883243 (16 tx)
miner speed 10s/60s/15m 655.7 651.8 158.7 H/s max 659.6 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883243 (23 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883243 (27 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883244 (4 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883244 (6 tx)
miner speed 10s/60s/15m 657.0 656.9 166.0 H/s max 659.6 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883244 (10 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883244 (18 tx)
```

Figure 146 System 6 Litecoin Mining Statistics

These are the System 6's mining results following an hour of Litecoin mining. The CPU pane on the left indicates that the CPU has been certified and is prepared for mining. Additionally given are the system's most recent hash rate and evidence of a handshake between the network and his Litecoin mining pool. In this case, the highest hash rate was 659.6H/s.

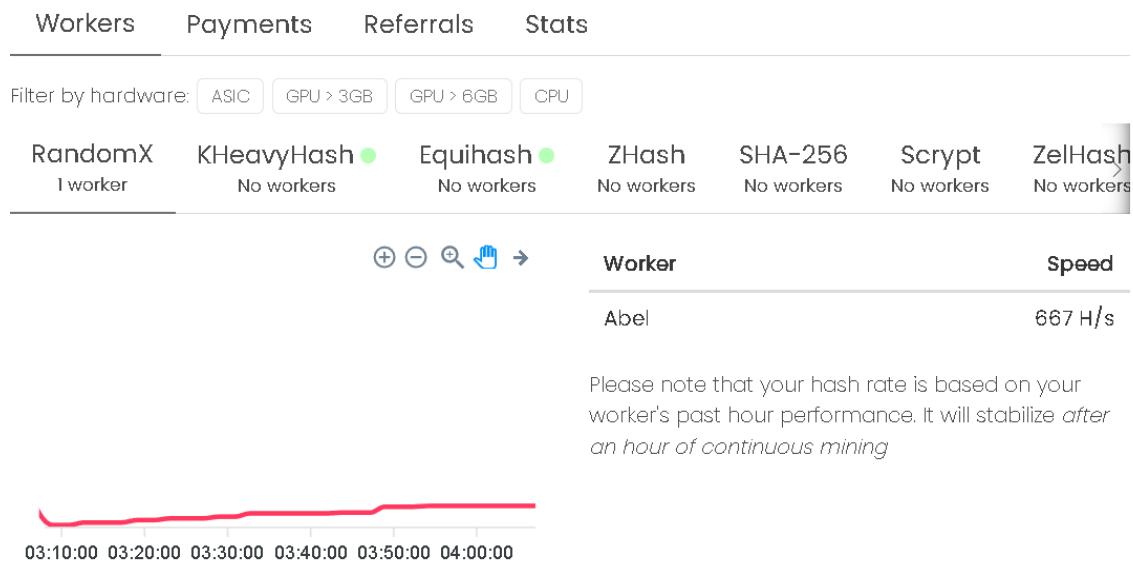


Figure 147 System 6 Litecoin Graph

Here is also a graph that could be easier for others to understand instead of reading from a command-line-prompt tool/text.

Analysis of System Performances during Crypto Mining

8.8.3 System 6 ZCash XMRig

After ZCash has successfully passed the mining process for the hour without any issues, the system was then configured to go ahead and start mining ZCash for another hour, here are the results of that mining process.

0.00054135_{zec}

Figure 148 System 6 ZCash Result

When it comes to ZCash and Dash, System 6 was able to mine a high amount of ZCash as it was mined at a time when not many people mine, this led the mining pool to not being as busy as it usually is. In total, System 6 mined 0.00005251 ZCash. This of course continued from the previous mine which stopped at 0.0004884.

```
net    new job from donate.ssl.xmrig.com:443 diff 1000K algo rx/0 height 2883564 (30 tx)
miner speed 10s/60s/15m 677.4 678.4 680.9 H/s max 684.1 H/s
net    new job from donate.ssl.xmrig.com:443 diff 1000K algo rx/0 height 2883564 (33 tx)
net    dev donate finished
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (30 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (37 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (43 tx)
miner speed 10s/60s/15m 682.3 682.4 681.0 H/s max 684.1 H/s
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (49 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (52 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (60 tx)
miner speed 10s/60s/15m 659.4 678.9 680.7 H/s max 684.1 H/s
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (67 tx)
cpu   accepted (28/0) diff 100001 (17 ms)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (71 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (75 tx)
miner speed 10s/60s/15m 681.6 676.8 680.7 H/s max 684.1 H/s
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (78 tx)
cpu   accepted (29/0) diff 100001 (17 ms)
cpu   accepted (30/0) diff 100001 (16 ms)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (85 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883564 (88 tx)
miner speed 10s/60s/15m 680.7 681.2 680.6 H/s max 684.1 H/s
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883565 (2 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883565 (7 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883565 (17 tx)
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883566 (7 tx)
miner speed 10s/60s/15m 681.0 669.2 679.7 H/s max 684.1 H/s
net    new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883566 (31 tx)
```

Figure 149 System 6 ZCash Mining Statistics

These are the mining outcomes for System 6 after an hour of ZCash mining. The CPU has been approved and is ready for mining, according to the CPU pane on the left. The system's most recent hash rate and proof of a handshake between the network and his ZCash mining pool are also provided. The greatest hash rate in this instance was 684.1H/s.

Analysis of System Performances

during Crypto Mining

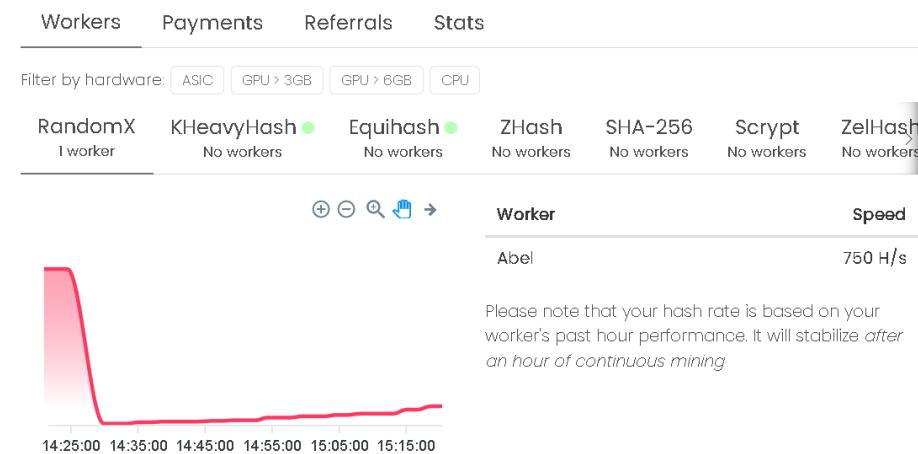


Figure 150 System 6 ZCash Graph

on addition, the following graph might be simpler to grasp for others than reading from a tool or text on a command-line prompt.

8.8.4 System 6 Dash XMRig

After reaching the end and also after finishing the ZCash mining process, here are the results of the mining process of Dash coin.

0.00054317 DASH

Figure 151 System 6 Dash Result

After the hour has passed and the mining process has been complete, System 6 managed to mine 0.00008535 Dash coin within the space of 1 hour, the mining process of course started after the previous system was complete which that led to the mining to start from 0.00045782 Dash coin.

```

net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883601 (32 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883601 (32 tx)
cpu accepted (26/0) diff 100001 (17 ms)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883601 (32 tx)
miner speed 10s/60s/15m 668.4 669.6 638.1 H/s max 671.9 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883601 (32 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883601 (31 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883602 (57 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883603 (5 tx)
miner speed 10s/60s/15m 670.4 669.3 638.1 H/s max 671.9 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883603 (8 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883604 (7 tx)
cpu accepted (27/0) diff 100001 (18 ms)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883604 (14 tx)
cpu accepted (28/0) diff 100001 (18 ms)
miner speed 10s/60s/15m 669.2 670.6 638.2 H/s max 671.9 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883604 (24 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883605 (6 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883605 (14 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883605 (20 tx)
miner speed 10s/60s/15m 671.0 671.1 638.4 H/s max 671.9 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883605 (25 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883605 (29 tx)
cpu accepted (29/0) diff 100001 (18 ms)
miner speed 10s/60s/15m 669.2 668.1 643.5 H/s max 671.9 H/s
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883605 (33 tx)
cpu accepted (30/0) diff 100001 (18 ms)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883605 (36 tx)
net new job from rx.unmineable.com:3333 diff 100001 algo rx/0 height 2883605 (41 tx)

```

Figure 152 System 6 Dash Mining Statistics

These are the System 6 mining results following an hour of Dash mining. The CPU pane on the left indicates that the CPU has been certified and is prepared for mining. Additionally revealed are the system's most recent hash rate and evidence of a handshake between the network and his Dash mining pool. In this case, the highest hash rate was 671.9H/s.

9. Final Analysis of the Mining Process

9.1 Analysis of unMineable Mining Process (System 1-3)

System 1	Bitcoin (BTC)	unMineable	722H/s	0.00000005
System 1	Ethereum (ETH)	unMineable	806H/s	0.00000042
System 1	Litecoin (LTC)	unMineable	500H/s	0.00001144
System 1	ZCash (ZEC)	unMineable	942H/s	0.00000142
System 1	Dash (DASH)	unMineable	667H/s	0.00000615

System 2	Bitcoin (BTC)	unMineable	222H/s	0.00000007
System 2	Ethereum (ETH)	unMineable	167H/s	0.00000046
System 2	Litecoin (LTC)	unMineable	444H/s	0.00001172
System 2	ZCash (ZEC)	unMineable	361H/s	0.00000376
System 2	Dash (DASH)	unMineable	250H/s	0.00000924

System 3	Bitcoin (BTC)	unMineable	56H/s	0.00000006
System 3	Ethereum (ETH)	unMineable	139H/s	0.00000064
System 3	Litecoin (LTC)	unMineable	28H/s	0.00001546
System 3	ZCash (ZEC)	unMineable	111H/s	0.00000270

System 3	Dash (DASH)	unMineable	56H/s	0.00000924
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9.2 Analysis for XMRig Mining Process (System 1-3)

System 1	Bitcoin (BTC)	XMRig	528H/s	0.00000007
System 1	Ethereum (ETH)	XMRig	806H/s	0.00000071
System 1	Litecoin (LTC)	XMRig	1.11Kh/s	0.00003054
System 1	ZCash (ZEC)	XMRig	1.03Kh/s	0.00000623
System 1	Dash (DASH)	XMRig	722H/s	0.00001322

System 2	Bitcoin (BTC)	XMRig	472H/s	0.00000011
System 2	Ethereum (ETH)	XMRig	444H/s	0.00000104
System 2	Litecoin (LTC)	XMRig	583H/s	0.00004020
System 2	ZCash (ZEC)	XMRig	278H/s	0.00002036
System 2	Dash (DASH)	XMRig	556H/s	0.00002293

System 3	Bitcoin (BTC)	XMRig	56H/s	0.00000011
System 3	Ethereum (ETH)	XMRig	167H/s	0.00000115
System 3	Litecoin (LTC)	XMRig	83H/s	0.00004244
System 3	ZCash (ZEC)	XMRig	83H/s	0.00002311
System 3	Dash (DASH)	XMRig	83H/s	0.00002581

9.3 Analysis of unMineable Mining Process (System 4-6)

System 4	Bitcoin (BTC)	unMineable	2120H/s	0.00000013
System 4	Ethereum (ETH)	unMineable	806H/s	0.00000169
System 4	Litecoin (LTC)	unMineable	3630H/s	0.0000897
System 4	ZCash (ZEC)	unMineable	5540H/s	0.00002140
System 4	Dash (DASH)	unMineable	6080H/s	0.00006108

System 5	Bitcoin (BTC)	unMineable	278H/s	0.00000003
System 5	Ethereum (ETH)	unMineable	306H/s	0.00000042
System 5	Litecoin (LTC)	unMineable	444H/s	0.00000388
System 5	ZCash (ZEC)	unMineable	194H/s	0.00000454
System 5	Dash (DASH)	unMineable	222H/s	0.00000207

System 6	Bitcoin (BTC)	unMineable	472H/s	0.00000000
System 6	Ethereum (ETH)	unMineable	583H/s	0.00000016
System 6	Litecoin (LTC)	unMineable	806H/s	0.00000524
System 6	ZCash (ZEC)	unMineable	806H/s	0.00000134
System 6	Dash (DASH)	unMineable	722H/s	0.00000407

9.4 Analysis for XMRig Mining Process (System 4-6)

System 4	Bitcoin (BTC)	XMRig	8010H/s	0.00000006
System 4	Ethereum (ETH)	XMRig	8110H/s	0.00000492
System 4	Litecoin (LTC)	XMRig	6960H/s	0.00007056
System 4	ZCash (ZEC)	XMRig	6590H/s	0.00048884
System 4	Dash (DASH)	XMRig	7720H/s	0.00045782

System 5	Bitcoin (BTC)	XMRig	250H/s	0.00000001
System 5	Ethereum (ETH)	XMRig	360H/s	0.00000016
System 5	Litecoin (LTC)	XMRig	667H/s	0.00000262
System 5	ZCash (ZEC)	XMRig	1030H/s	0.00001871
System 5	Dash (DASH)	XMRig	722H/s	0.00002688

System 6	Bitcoin (BTC)	XMRig	500H/s	0.00000000
System 6	Ethereum (ETH)	XMRig	8110H/s	0.00000024
System 6	Litecoin (LTC)	XMRig	6960H/s	0.00000877
System 6	ZCash (ZEC)	XMRig	6590H/s	0.00005251
System 6	Dash (DASH)	XMRig	7720H/s	0.00008535

9.5 Analysis of unMineable Mining Process (System 7-8)

System 7	Bitcoin (BTC)	XMRig	83H/s	0.00000000
System 7	Ethereum (ETH)	XMRig	194H/s	0.00000199
System 7	Litecoin (LTC)	XMRig	111H/s	0.00000128
System 7	ZCash (ZEC)	XMRig	222H/s	0.00000222
System 7	Dash (DASH)	XMRig	194H/s	0.0000817

System 8	Bitcoin (BTC)	XMRig	333H/s	0.00000001
System 8	Ethereum (ETH)	XMRig	639H/s	0.00000036
System 8	Litecoin (LTC)	XMRig	694H/s	0.00000490
System 8	ZCash (ZEC)	XMRig	583H/s	0.00000363
System 8	Dash (DASH)	XMRig	583H/s	0.00000817

10. Conclusion

As a result, studying system performance data when mining cryptocurrency exposes crucial details regarding the potency and usefulness of various systems. To compare the unMineable and XMRig mining processes, several systems (Systems 1-8) can be looked at, and some significant conclusions can be made. The data consistently demonstrates that System 4 has the greatest hash rates of all the systems, regardless of the mining technique used. This shows that System 4 performs better in terms of mining efficiency and capability than the other systems being investigated. It is important to remember, too, that System 4 also consumes more power, which results in greater energy costs. When evaluating the general profitability and sustainability of a mining operation, the trade-off between increasing hash rates and increasing power consumption must be carefully considered. This highlights how crucial it is to balance mining output with energy efficiency in order to boost profitability. Individual priorities like hash rate, power consumption, and cost effectiveness are ultimately what determine the type of hardware and mining method. Miners should carefully consider these elements and align them with their own objectives and limitations. For miners and business professionals trying to optimize their mining operations, monitoring system performance during bitcoin mining is a priceless tool. By weighing the advantages and disadvantages of various systems, miners can increase their mining productivity, profitability, and general performance in the dynamic world of cryptocurrency mining.

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