



# DND

DYNAMIC • NEW • ADAPTABLE

Whitepaper  
ver. 2.0 ENG

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Nowadays the virtual space is facing a hurricane of cryptocurrencies stirring up millions of people's minds around the world. The glory and success of the Bitcoin project inspires many enthusiasts, so almost every day there are more and more new digital coins and tokens being created.

Unfortunately, the quality of ~90% of blockchain projects leaves much to be desired, and is sometimes really appalling. Seekers of profit and making money at the expense of others, scammers and crooks creating clones of well-known cryptocurrencies, faking names, logos, injecting hidden viruses into the source code and binaries – the cryptoworld has never been such a dangerous place as it is now.

In the midst of this carnival of the faceless altcoins being created only for speculations, a group of skilled crypto enthusiasts accustomed to high quality and thorough professional approach, have come to an idea.

The idea of creating a project, which the electronic world and fans of the new digital economy have never seen before.

The project combining all the positive aspects of successful digital currencies and, at the same time, taking into account all of their flaws and weak points.

The project satisfying miners, investors, and even ordinary people with no idea about the new digital reality of our days.

The project bringing tangible benefits not only to the digital world but also to the real one.

The project conquering the hearts of all its users and firmly standing in line with Ethereum, Dash, Neo, Zcash, Monero, and the others.

In the process, we relied on certain principles:

- Our project must solve a number of specific problems related to the modern cryptocurrencies.
- Our project must satisfy both the miners and the investors.
- Our project should bring real benefits to humanity.

Only adherence to these principles made it possible for us to create something more than just a digital currency and to build a sustainable chain between the virtual and the real world.

The chain, which would be firmly entwined in the objective reality with chains of events, relationships, family ties, and with the most hi-tech chains – chains of blocks. Life is inconceivable without such chains, so we proudly present to you the brand new and revolutionary digital cryptocurrency – XDNA.

## **xDNA Features**

### BitGun

Innovative principle for the dynamic change of block rewards

### T.N.T.

Advanced multi-level masternodes concept –  
Triple Node Technology

### xDNA Foundation

Non-commercial charity cryptocurrency fund

### HEX

A novel hashing algorithm

### xDNA Creation

A department for the creation of new cryptocurrencies

### xDNA Research

Promotion of scientific research that benefits the humanity

## Specifications

- Name & ticker: XDNA
- Consensus algorithm: PoW/POS
- POW phase duration: 1440000 blocks
- PoW block reward: Dynamic, 4-109 XDNA lowering by 6.94% every month during 24 months
- Instamine protection: First 720 blocks
- Hashing algorithm: Hex
- Maximum XDNA total supply: 80,620,000
- POS starting block: 1440001
- POS block reward: 20 XDNA lowering by 1 every 525,600 blocks until block reward is 1 XDNA
- POS block reward distribution: SeeSaw
- Premine: 971,712 XDNA
- Blocksize: 1 MB
- Blocktime average: 1 min (DGW/3)
- Number of transaction confirmations: 6
- Maturity: 60 confirmations

## Problems most modern cryptocurrencies have and the solutions we offer

Bitcoin appeared early in the 21st century and enchanted millions of people across the world in the following decade. Blockchain technology and the power of decentralization that it represents promise to change the life of every person on Earth in the very near future.

However, in the sphere of cryptocurrencies (as in any other high-tech sphere) there are a number of problems such as scalability, security, the overload of the network with microtransactions, and some others. These problems are usually of a fundamental nature and they cannot be solved efficiently by the known methods.

Along with the fundamental problems related to cryptocurrencies, there is a whole number of minor flaws, some of which have already been fixed in several projects, while the importance of some others is still being unfairly underestimated.

### Problem 1. Slow transaction confirmations

Bitcoin's 10 minute block time means that waiting for 6 confirmations on a transaction is an hour long ordeal. Long confirmation times are an unaffordable luxury in today's economy and are a flaw common for many of the major and well-known cryptocurrencies today.

#### Solution

To overcome the problem of low transaction speed, a block time value of 60 seconds is utilized. Dark Gravity Wave v3 algorithm is used to provide network difficulty retargeting for each block.

Only 6 confirmations are necessary for the validation of a transaction, and therefore any transaction in XDNA will not take more than 6 minutes.

XDNA also utilizes InstantSend [1], an instant transaction mechanism allowing the instant broadcast of a given transaction through masternodes with balance immediately showing in the recipient's wallet.

### Problem 2. Emerging of ASICs and FPGAs that support GPU PoW algorithms

Application specific integrated circuits (ASICs) and field-programmable gate arrays (FPGAs) represent dramatic efficiency and productivity improvements over the existing GPU technology. Hashing algorithms like Scrypt, X11, and Sha256 all require expensive and specialized equipment to mine effectively, making them inaccessible for the vast majority of the population. In addition, these types of specialized hardware centralize hashpower for and represent a potential threat to the health of the network.

### **Solution**

In order to solve this problem, we developed a novel hashing algorithm called HEX.

That algorithm has proved good enough to be used with GPUs from different manufacturers. In addition, this algorithm is not supported by ASICs or FPGAs, so miners all over the world can safely maintain the XDNA network using their GPUs, with no risk of being flooded by huge capacities of industrial mining centres.

We did not select the easy way to create a trendy hashing algorithm, which is a basic sequence of several well-known kernels. We create something new.

You can read more about HEX in the according chapter.

### **Problem 3. “Instamine”**

Instamining takes place when a developer or early miner solves a large number of blocks very quickly, early in the life-cycle of a coin. Instamining can also happen when a coin has a difficulty algorithm that adjusts very slowly to network hashrate fluctuations.

### **Solution**

To prevent instamine, a block reward of 1 XDNA is set for the first 720 blocks.

### **Problem 4. “Premines”**

Oftentimes, developers will hard-code a large block reward for the first block of any blockchain project. That first block reward, often called a premine, can be programmed to any size and many projects take overtly-greedy premines.

### **Solution**

Some cryptocurrency creators premine up to 50% of the maximum coin supply in first blocks.

The XDNA team have a realistic philosophy, so our premine is only 0.7% from the total estimated supply during POW, or 971,712 XDNA.

You can learn more about the XDNA premine distribution in the appropriate section.

### **Problem 5. Greed**

Developers of new cryptocurrencies often lack resources and see their projects as a means for personal enrichment without the willingness to apply their creation to charitable purposes.

Considering the majority of successful projects, very few people think of using the premine coins to the benefit of charitable causes and instead seek maximum profits. At the same time, there are hundreds of millions of people throughout the world in need of food, clean water, medicine, and other essentials things.

### **Solution**

The XDNA team sincerely believes that there is a huge number of people in need. A portion of our premine, namely 350,000 XDNA, will be used to create a charity fund – XDNA Foundation. This will allow raising and distributing funds to help various organizations and people in need around the world.

Together with the international community, we can create way more than just a cryptocurrency!

### **Problem 6. "Governance" budgets**

Some of the cryptocurrency creators use part of every block's reward as a payment into a governance fund or an address they control. While this idea is worthwhile in concept, many projects have high governance fees that operate as secondary enrichment mechanisms for the already rich developers.

### **Solution**

As a compensation to the XDNA development team, 1% of each block reward is held. This is comparable with the size of the commissions used by mining pools.

With no extravagant pre-mine or ICOs - we have nothing to hide.

1%.

That is all of it.

### **Problem 7. Nethash fluctuations significantly impact mining rewards**

Along with total nethash, difficulty also increases, which in its turn leads to reduced "wages" of miners supporting the functioning of the blockchain. The latter problem is caused by quite obvious reasons. Miner's income is directly proportional to the currency price and inversely proportional to the total nethash.

### **Solution**

To solve the problem of reducing the miners' rewards a unique feature of changing the block reward according to the total nethash was developed – the BitGun, named after one of the XDNA developers.

The BitGun principle is a gradual multi-stage block reward increase, allowing miners to receive a relatively stable reward (within certain limits) for maintaining the XDNA network functionality.

You can read more about BitGun in the according chapter.

### **Problem 8. Masternode collateral requirements**

Too high masternode costs lead to the inability to obtain it for a “common miner”, whereas if the cost is too low, investors lack interest in its acquisition.

### **Solution**

To attract both miners and investors into setting up XDNA masternodes we have developed a system that allows simultaneous functioning and interaction of 3 types of masternodes. Each type requires different amount of coins for collateral and has a different reward size. We have named this system T.N.T. - TripleNodeTechnology.

You can read more about T.N.T. in the according chapter.

We created XDNA in order to:

- Partially solve the above problems and negate the disadvantages of the existing cryptocurrencies
- Bring a functional cryptocurrency with a real innovation to the market
- Provide meaningful improvements to the existing proof-of-work approaches
- Encourage harmony between the miners and speculators
- Bring benefits to the real world
- Change the established paradigm of reducing the miners' income with increasing network capacity



## BitGun

To change that long established paradigm of miners' rewards being linear-inversely proportional to the network hashrate we have developed the advanced BitGun feature.

Usually a miner's reward directly depends on the network hashrate, meaning larger nethash results in a lower reward portion going to each miner. In other words, if the amount of GPUs in the network grows 1000 times, the average miner's reward within given time frame will become 1000 times less. Some cryptocurrencies use non-linear dependencies, but their principle also remains the same: the higher the network hashrate, the less each miner receives.

BitGun uses another approach – as the total network hashrate grows, the block reward gradually increases, allowing us to keep the average miner's reward relatively stable.

This is how it works:

The reward size for each block changes every time at the moment of block generation, depending on the total average nethash recorded for the previous 24 blocks.

The reward size for each block changes in accordance with a set of "levels" reflecting the Fibonacci series. There are 15 levels.

Table 1 presents the levels defined by the total nethash and the corresponding block reward size.

For the block reward size to change automatically, the total XDNA nethash must overcome the corresponding threshold value from the table.

Table 1

Level	Network hashrate (Gh/s)	Block reward
1	10	4
2	20	5
3	30	7
4	50	10
5	80	14
6	130	19
7	210	25
8	340	32
9	550	40
10	890	49
11	1,440	59
12	2,330	70
13	3,770	82
14	6,100	96
15	9,870	109

In order to regulate the emission, the values presented in Table 1 are subject for a gradual diminishing. Since block 177000 (mined in October 2018), the reward for each BitGun level will be monthly decreased by 6.94% during 24 months. At the end of this period, the reward at the first level will be 1 XDNA, while the reward at the 15th level will be 20 XDNA.

The scheduled block reward changes are given in Table 2.

Table 2

Month	Oct. 2018	Nov. 2018	Dec. 2018	Jan. 2019	Feb. 2019	Mar. 2019	Apr. 2019	May. 2019	Jun. 2019	Jul. 2019	Aug. 2019	Sep. 2019
Block height	177000	220200	263400	306600	349800	393000	436200	479400	522600	565800	609000	652200
1	3.8	3.6	3.4	3.2	3	2.8	2.7	2.6	2.5	2.4	2.3	2.2
2	4.7	4.4	4.1	3.9	3.7	3.5	3.3	3.1	2.9	2.7	2.6	2.5
3	6.6	6.2	5.8	5.4	5.1	4.8	4.5	4.2	4	3.8	3.6	3.4
4	9.4	8.8	8.2	7.7	7.2	6.8	6.4	6	5.6	5.3	5	4.7
5	13.1	12.2	11.4	10.7	10	9.4	8.8	8.2	7.7	7.2	6.8	6.4
6	17.7	16.5	15.4	14.4	13.5	12.6	11.8	11	10.3	9.6	9	8.4
7	23.3	21.7	20.2	18.8	17.5	16.3	15.2	14.2	13.3	12.4	11.6	10.8
8	29.8	27.8	25.9	24.2	22.6	21.1	19.7	18.4	17.2	16.1	15	14
9	37.3	34.8	32.4	30.2	28.2	26.3	24.5	22.8	21.3	19.9	18.6	17.4
10	45.6	42.5	39.6	36.9	34.4	32.1	29.9	27.9	26	24.2	22.6	21.1
11	55	51.2	47.7	44.4	41.4	38.6	36	33.6	31.3	29.2	27.2	25.4
12	65.2	60.7	56.5	52.6	49	45.6	42.5	39.6	36.9	34.4	32.1	29.9
13	76.4	71.1	66.2	61.7	57.5	53.6	49.9	46.5	43.3	40.3	37.6	35
14	88.5	82.4	76.7	71.4	66.5	61.9	57.7	53.7	50	46.6	43.4	40.4
15	101.5	94.5	88	81.9	76.3	71.1	66.2	61.7	57.5	53.6	49.9	46.5

Month	Oct. 2019	Nov. 2019	Dec. 2019	Jan. 2020	Feb. 2020	Mar. 2020	Apr. 2020	May. 2020	Jun. 2020	Jul. 2020	Aug. 2020	Sep. 2020
Block height	695400	738600	781800	825000	868200	911400	954600	997800	1041000	1084200	1127400	1170600
1	2.1	2	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1
2	2.4	2.3	2.2	2.1	2	1.9	1.8	1.7	1.6	1.5	1.4	1.3
3	3.2	3	2.8	2.6	2.5	2.4	2.3	2.2	2.1	2	1.9	1.8
4	4.4	4.1	3.9	3.7	3.5	3.3	3.1	2.9	2.7	2.6	2.5	2.4
5	6	5.6	5.3	5	4.7	4.4	4.1	3.9	3.7	3.5	3.3	3.1
6	7.9	7.4	6.9	6.5	6.1	5.7	5.4	5.1	4.8	4.5	4.2	4
7	10.1	9.4	8.8	8.2	7.7	7.2	6.8	6.4	6	5.6	5.3	5
8	13.1	12.2	11.4	10.7	10	9.4	8.8	8.2	7.7	7.2	6.8	6.4
9	16.2	15.1	14.1	13.2	12.3	11.5	10.8	10.1	9.4	8.8	8.2	7.7
10	19.7	18.4	17.2	16.1	15	14	13.1	12.2	11.4	10.7	10	9.4
11	23.7	22.1	20.6	19.2	17.9	16.7	15.6	14.6	13.6	12.7	11.9	11.1
12	27.9	26	24.2	22.6	21.1	19.7	18.4	17.2	16.1	15	14	13.1
13	32.6	30.4	28.3	26.4	24.6	22.9	21.4	20	18.7	17.5	16.3	15.2
14	37.6	35	32.6	30.4	28.3	26.4	24.6	22.9	21.4	20	18.7	17.5
15	43.3	40.3	37.6	35	32.6	30.4	28.3	26.4	24.6	22.9	21.4	20

The gradual decrease of the block rewards lowers the total emission of XDNA and increases its investment value. The chart of the average monthly emission change is given in Figure 1.

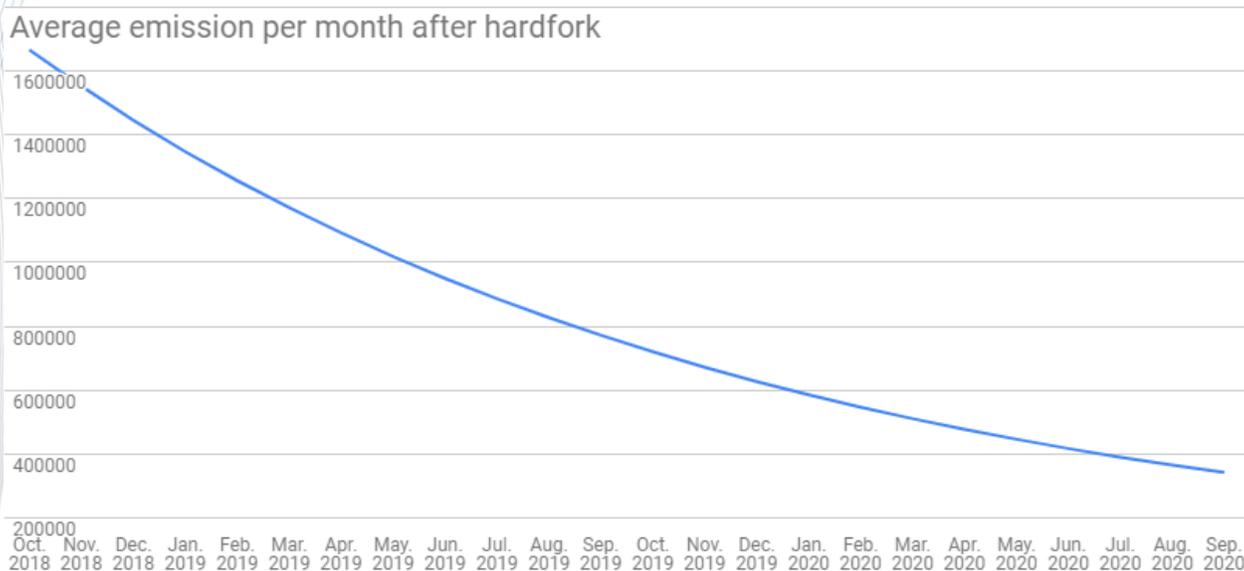


Figure 1

What are the advantages of using BitGun?

Compared to the conventional block reward calculation methods, BitGun allows us to stabilize the reward amount received by miners in a certain period of time. With a sufficient growth of network hashrate the average reward slightly decreases, remaining, however, much larger than in systems with the traditional distribution.

Table 3 shows comparison of an average 24-hour reward for one Nvidia GTX 1080Ti GPU using the classical calculation method and BitGun.

Table 3

	Approximate amount of 1080ti	XDNA/1080ti/day with BitGun	XDNA/1080ti/day
Levels 1-5	1,000	3	3
	2,000	2.62	1.47
	4,000	1.87	0.73
Levels 6-10	10,000	1.42	0.29
	20,000	1.2	0.15
	40,000	0.75	0.07
Levels 11-15	100,000	0.44	0.03
	200,000	0.26	0.01
	400,000	0.18	0.007

As shown in the table above, at low network hashrate the rewards remain almost identical, but as the network grows the advantage of BitGun becomes obvious and can reach several hundred or thousand percent.

Figure 2 presents the comparison of the daily reward for a single Nvidia GeForce GTX 1080ti GPU depending on the total network hashrate, stated in the number of mining GPUs.

Mathematical modelling was performed for levels 1-8. For this simulation, we used the following conditions: a miner gets a reward from each block; hashrate of a single GPU is 17.5 Mh/s.

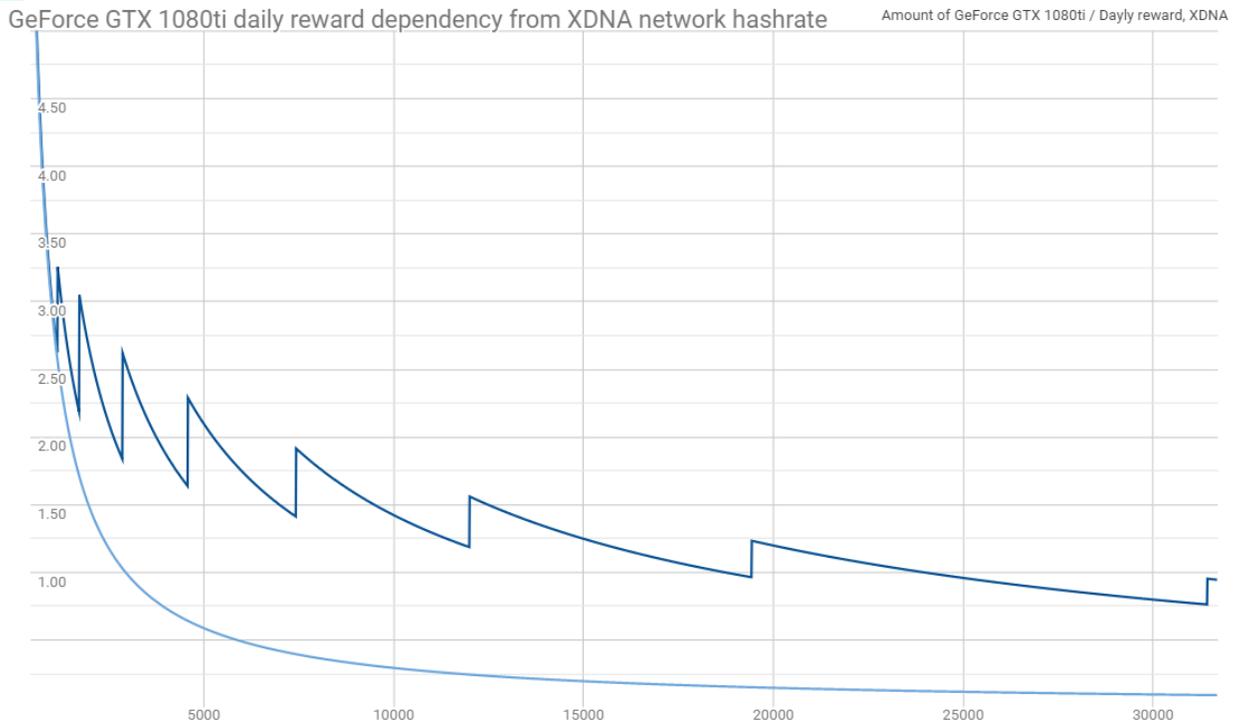


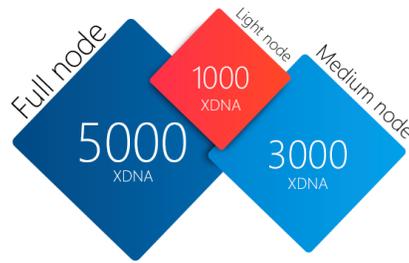
Figure 2

As we see even with a significant increase in network hashrate each given GPU will keep receiving relatively stable reward within one BitGun level, this reward is much larger than a reward calculated using the classic system would be.

These simulation results are valid for Levels 2-14 and can be successfully approximated for any time interval.

The novelty of this approach is primarily in the fact that it changes the very paradigm of pseudolinear-inverse relation of a miner's income to the nethash.

Miners from all over the world can now count on decent mining rewards even if the network hashrate suddenly grows 1000 times.



### T.N.T.

Relying only on the most advanced aspects of the world leading cryptocurrencies, we propose to use masternodes to ensure network stability.

However, given the experience of creating and using masternodes in different projects, we put harmony between miners and investors' wishes and possibilities on the first place in XDNA.

To make it possible for everyone to set up a masternode, we have developed three types of them. Each type takes a different amount of XDNA and brings a variety of income.

This system is called T.N.T. – TripleNodeTechnology.

Light Node – requires 1,000 XDNA.

Medium Node – requires 3,000 XDNA.

Full Node – requires 5,000 XDNA.

During POW the masternodes will receive the following reward (different for each type) for maintaining the network stability and performing additional functions:

Light Node – 5% from total block reward

Medium Node – 15% from total block reward

Full Node – 25% from total block reward

During POS the masternode rewards proportion will remain but the amounts will be determined by the SeeSaw algorithm [2].

The major advantage of the T.N.T. system over other tiered MN systems lies in its elaborated technological benefits.

A common self-budgeted crypto projects(DASH and related) the coinbase has **three outputs**. The first one is for miners, the second for the masternodes, and the third for the budget system. If there are several tiers of MNs, there still is only **one** coinbase output, regardless of how many tiers does the project have.

In the case of XDNA we developed a unique system with **six coinbase outputs**. Thanks to that, masternodes belonging to all **three** tier receive reward for each block

Figure 3 presents the comparison of the common MN reward system and our T.N.T.

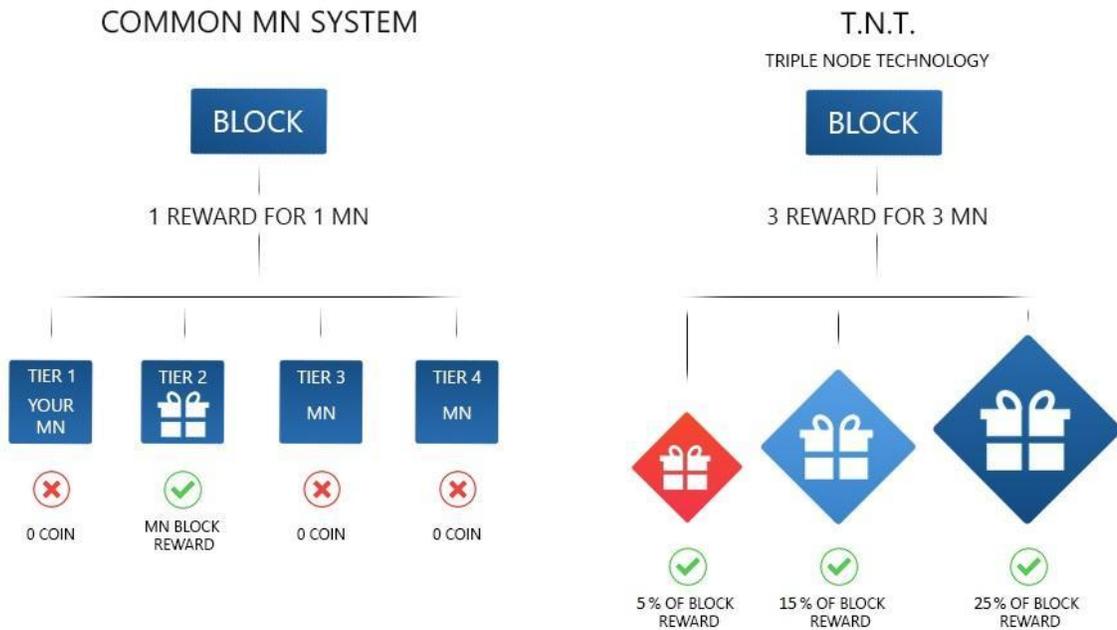


Figure 3

Despite the main masternodes' task being network stability, they are also an excellent means of investment.

Series of calculations have been made to determine the profitability and reward for the different types of masternodes.

It should be noted that BitGun levels are directly affecting masternodes profitability – block reward at higher nethash values increases, therefore the income of masternodes increases as well.

Fig. 4 shows the calculation results for the payback of different masternode types at various BitGun levels, depending on the amount of masternodes in the network.

### Masternodes payback (any type), days

Level

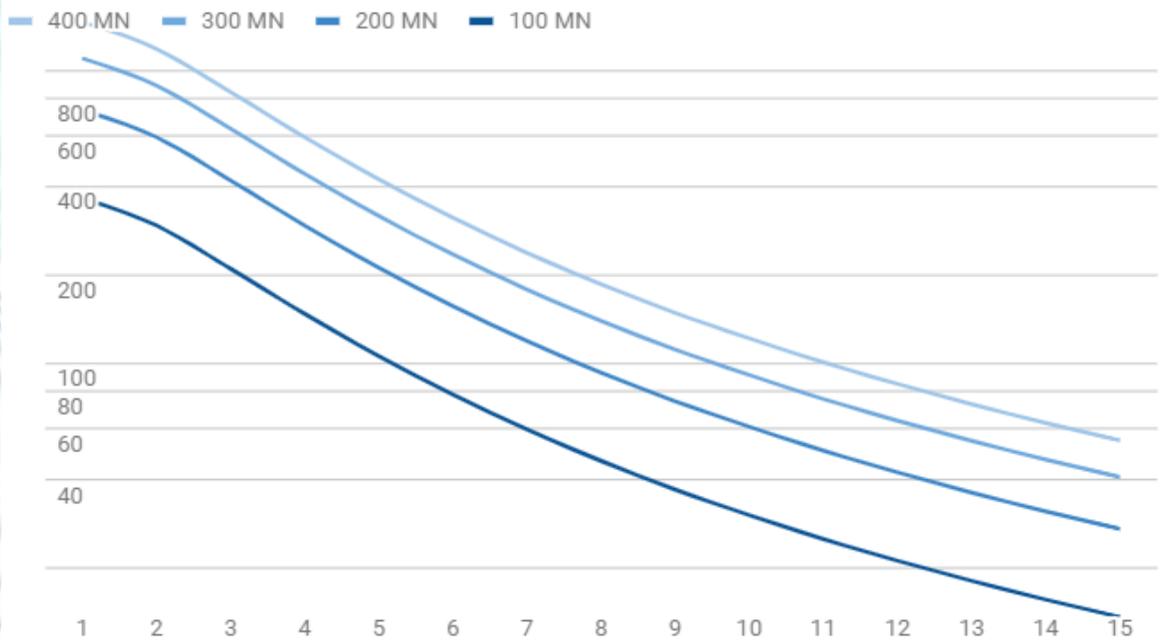


Figure 4

We have also calculated daily masternode payouts for a set number of 150 masternodes depending on their type and actual BitGun level (Fig. 5), as well as the annual ROI depending on BitGun levels for each masternode type in the case when 100 masternodes of each type exist in the network (Fig. 6).

### Masternodes payments per day, XDNA (for 150 MN of any type)

Level

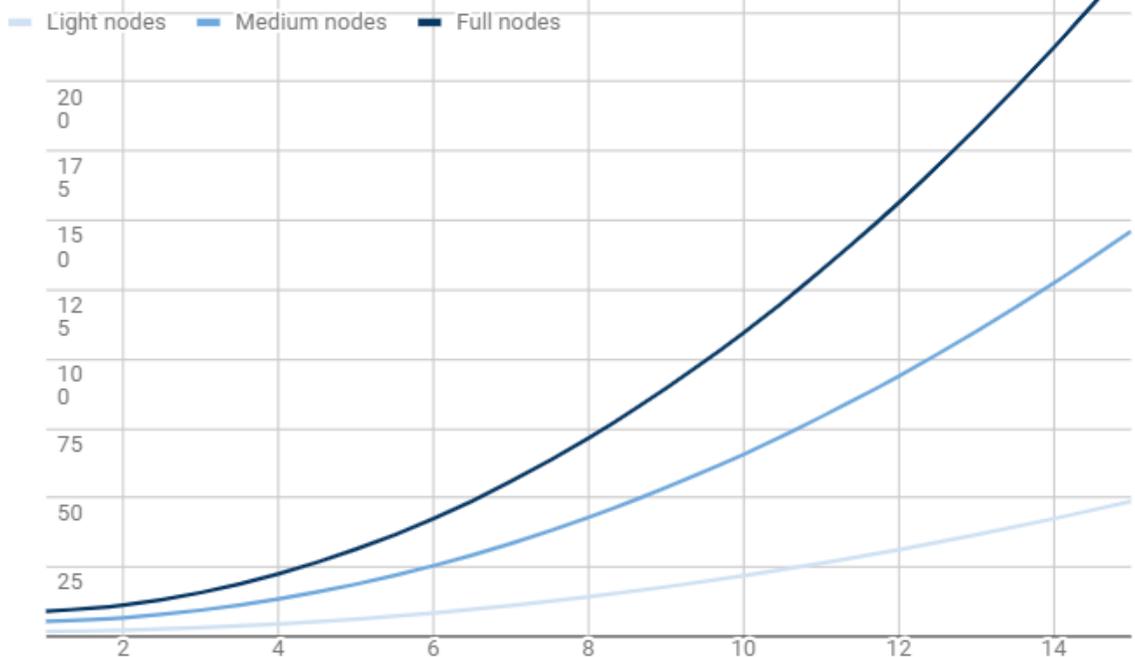


Figure 5

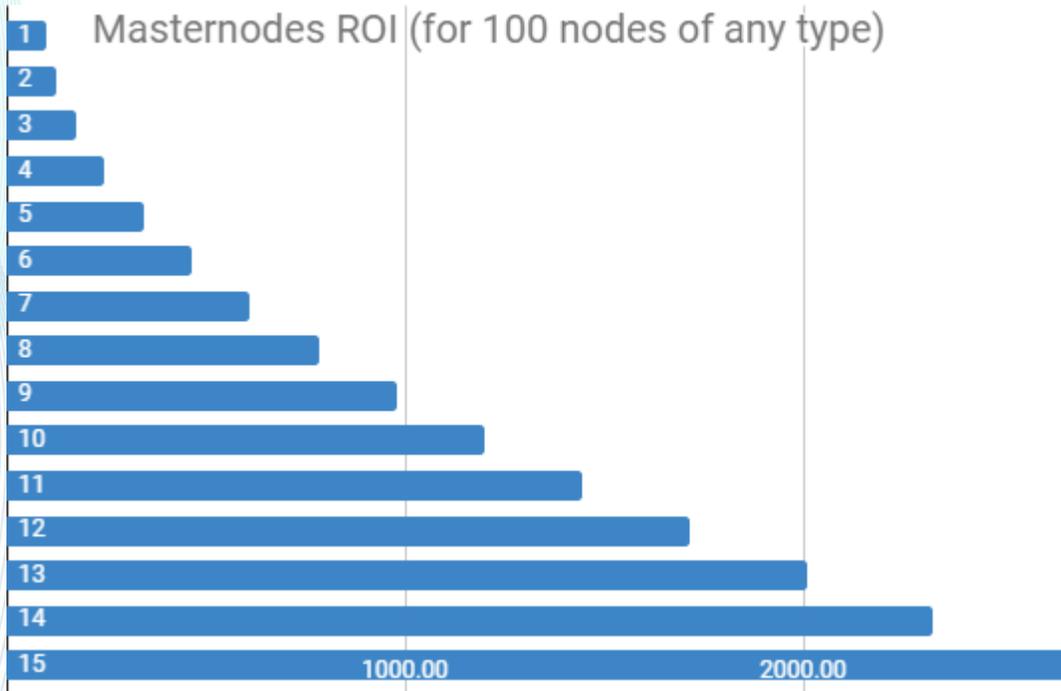


Figure 6



## HEX

The initial hashing algorithm chosen for XDNA project was keccak. There were several reasons for this: efficient operation on the GPUs from different vendors, stable power consumption, the possibility of dual mining.

However in about a month from the launch our network came under an attack from an industrial mining farm (probably FPGA, but this has not been undoubtedly proven). In certain times this farm amounted 75% of the network hash, thus ruining its decentralized nature. This resulted in drastic consequences - a single player was selling colossal quantities of XDNA coins, which caused the exchange rate to go down several times and scared away the other miners.

The XDNA team decided to change the hashing algorithm, and we did not select the easy way of creating a trendy algo by making some simple changes to the existing ones. We wanted to create something new.

Team XDNA presents a novel hashing algorithm - HEX!

The working principle of HEX is calculating the block hash with a pseudo-random sequence of 16 different algorithms (kernels):

- BLAKE
- BMW
- GROESTL
- JH
- KECCAK
- SKEIN
- LUFFA
- CUBEHASH
- SHAVITE
- SIMD
- ECHO
- HAMSI
- FUGUE
- SHABAL
- WHIRLPOOL
- SHA2.

This is how it works.

From the hash value of the previous block, one hexadecimal position is taken. It corresponds to the number of a kernel from the above list. This kernel is used to calculate the hash for the current block. One hexadecimal position of the obtained value points to the next kernel in the same way. The complete sequence includes 16 hashing operations and the order of the kernels in it CAN NOT be predicted. Each nonce has its own sequence. Only the result of the final hashing operation is validated.

It may seem that HEX is a clone of x16r. This is not true. In x16r, sixteen hexadecimal positions are taken from the hash of the previous block, which **determine** the order of the kernels for the current block. Therefore, this sequence is not really random and does not change inside the block.

The HEX algorithm possesses a number of pronounced benefits compared to the majority of existing algorithms:

- it is not a "dummy" algo like some popular ones, where the GPU actually spends a lot of time awaiting commands and not performing computations, which is not beneficial for the GPU's service life;
- it exhibits a stable and uniform GPU load and thus provides for better efficiency of the equipment;
- constant and unpredictable variation of the kernels presents a pain for the adaptation of FPGAs and ASICs to it.



## XDNA Foundation

We think about the world. We realize that there are many charity organizations under the sun providing free assistance to those in need. We also want to be a part of something bright and good, helping people.

We created the XDNA Foundation – the cryptocurrency charity fund aimed at providing targeted assistance to individuals and organizations and funds with insufficient or no funding.

To start up the Foundation, 350,000 XDNA have been allocated. The assets of this Fund are credited to a special address assigned to the Foundation. The amount of XDNA in the Foundation’s wallet is public and controlled information: it is enough to open the block explorer and search for the wallet address available on the XDNA official website in the appropriate section.

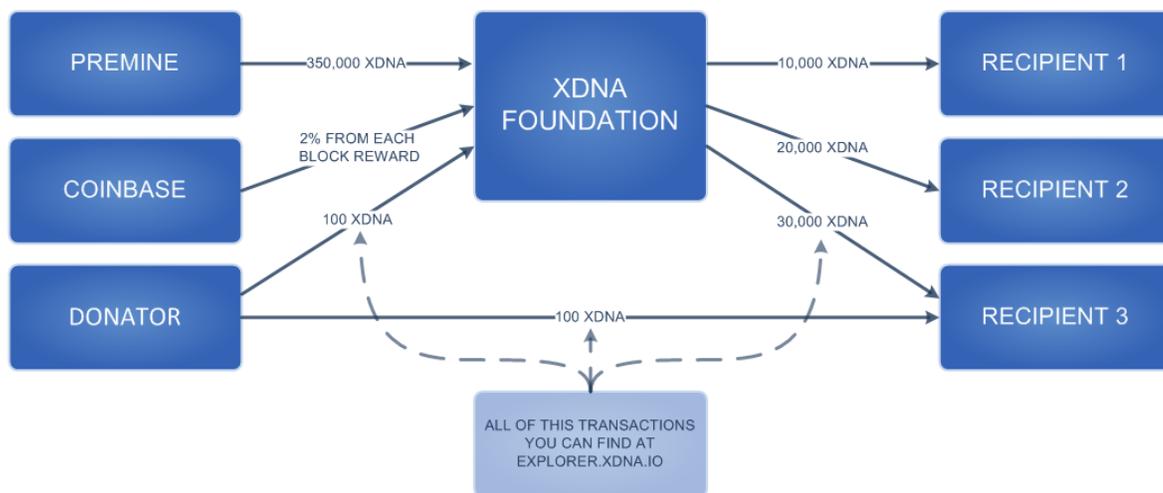


Figure 7

This is how it works.

If you are a member of a charity organization with a very low funding, community/social project coordinator, a youth sports team manager or just need help from the XDNA Foundation, you should do the following:

Fill out the form in the appropriate section of the website, briefly describing your organization, the related problems and difficulties.

Attach pictures, paperwork and generally as much information as you can.

If we feel the request is genuine and fits within our objectives it will be reviewed and marked "under consideration" in the appropriate section. After doing fact-checking, the XDNA Foundation management will make the final decision on starting the fund collection or providing the full amount and if it's positive we will mail you (or present in person) a paper wallet pre-loaded with XDNA. In order to avail the funds, you will need to install a XDNA PC wallet and restore them. Then you will be able to swap the received XDNA for BTC or cash on any exchange of your choice and use them.

If you want to help people or organizations using XDNA, nothing is as simple as that. Buy XDNA on any of the exchanges and transfer them on the Fund wallet address. It is really that simple.

Want to make a transfer to the Foundation in another cryptocurrency? No problem, we will exchange it for XDNA and transfer them to the Foundation or directly to one of the recipients.

You can be sure that not a coin of the XDNA Foundation will be wasted.

If any organization around the world wants to implement the sale of food, water or medical supplies for XDNA, even for charity purposes – join us, together we'll make this world a better place!



## XDNA Creation

Have you ever thought about creating, **your own cryptocurrency?**

*Not simply an Ethereum based token/smartcontract, but your very own blockchain-project.*

One of the major areas of interest for our project is crypto development combined with the search for investors and brand promotions. The number of players in this field of the crypto market is continuously growing, as does the number of the emerging projects. Therefore, the questions of quality and efficiency are crucial.

Our team puts quality first in any activity, be it the development of a novel technical feature, a targeted marketing campaign, or even the creation of a “turnkey” cryptocurrency.

Currently (in the late 2018) this sphere of our activity is being prepared and organized, as we would like to provide a top quality service.

Here is a (incomplete) list of services to be provided by the XDNA Creation platform:

1. A “turnkey” PIVX-based blockchain project.
2. Development of innovative technical features.
3. Launch of several variations of block explorer.
4. Running testnet, technical preparation for a coin's launch.
5. Brand creation, website creation
6. Promotion on crypto related resources
7. Management of a project's accounts in social networks.
8. Finding partnerships with other crypto projects.
9. Listing of a project on key resources in order to increase the popularity and active user base.
10. Conduction of talks with crypto exchanges, negotiation for exclusive listing conditions.



## XDNA Research

In an effort to promote the research related to medical, bioinformatical, environmental, and other fields which can help to cure diseases and make our lives better, team XDNA will be holding a number of Programs branded XDNA Research. Their aim will be to spread information on such studies, support the scientists and involve the community into the research activities.

We have already successfully carried out the First Program and brought considerable computation power to serve in the Stanford University's FoldingAtHome project fighting cancer, Alzheimer's and Parkinson's diseases. You can view our team stats here:

<https://stats.foldingathome.org/team/234454>

Come and join us!

## Timeline and block reward distribution

XDNA lifespan can be divided into 2 phases – Proof-Of-Work and Proof-Of-Stake. During these phases the block reward size and distribution differ.

During POW the block reward is determined by BitGun, the following block reward distribution applies:

- 52% to miners;
- 25% to Full Nodes;
- 15% to Medium Nodes;
- 5% to Light Nodes;
- 2% to XDNA Fund;
- 1% to developers team.

Based on above, block reward distribution during PoW phase will be as shown on Figure 8.

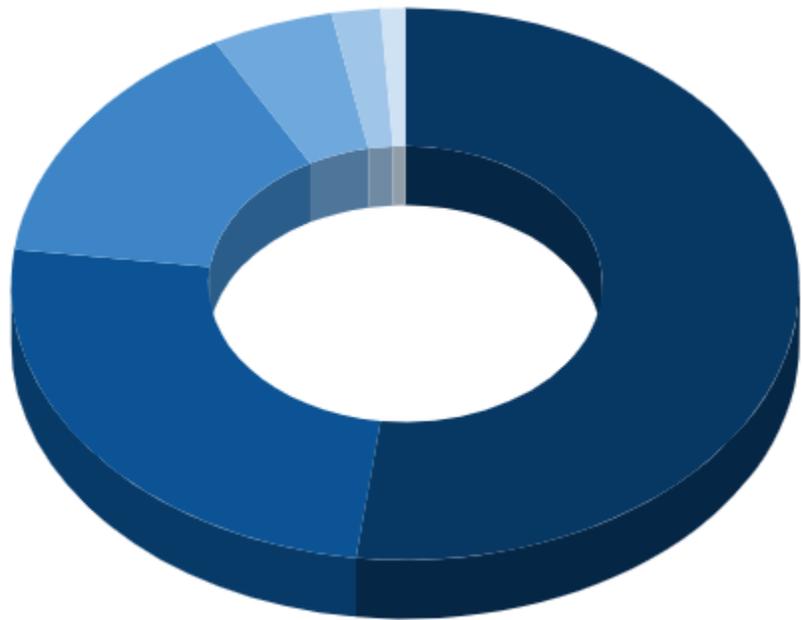


Figure 8

At block 1440001 or in approximately 1000 days XDNA will switch to POS.

At POS start the block reward will be 20 XDNA, which is equal to 15th BitGun level.

This amount will lower by 1 coin every 525600 blocks (or approx. every year) until eventually the block reward will become 1 XDNA.

During POS the block reward distribution is handled by SeeSaw [2] algorithm. Masternodes' reward proportion will remain, but the proportion between the total masternodes' rewards and the staking wallets' reward will be dynamically changing.

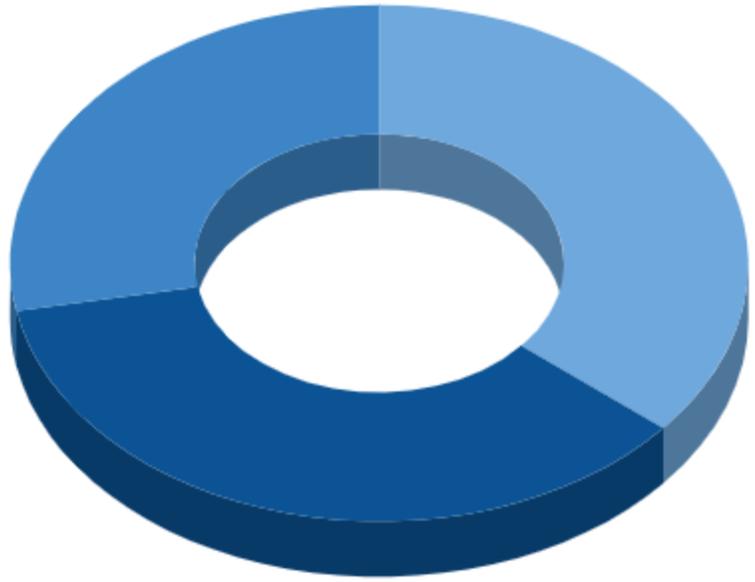
Apart from that, 2% from each block reward will keep going to XDNA Foundation and 1% will go to Developers fund.

As we cannot predict the network hashrate during the POW period and the rewards are dynamic, it's not possible to calculate the maximum coin supply for the POW phase.

Here is how the premine is divided:

- 350,000 XDNA – creation of XDNA Foundation.
- 271,712 XDNA – developing team reimbursement, including:
  1. Initial salary for Developers
  2. Renting VPSes for seed-nodes
  3. Site creation and domain rights
  4. Design works
  5. SSL certificates and other expenses during the creation of the project.
- 350,000 XDNA – marketing expenses, including:
  1. Bounty campaigns
  2. Social media promotion
  3. Community draws and contests
  4. Sponsorships
  5. Offline media events
  6. Exchange listing fees
  7. Crypto-charts listing fees
  8. Souvenir production
  9. Advertising through blogs, video blogs etc
  10. Marketing expenses for printed press and other sources.

- Marketing share
- XDNA Foundation
- Development share



*Figure 9*

## Reference list

1. DASH Masternodes <https://dashpay.atlassian.net/wiki/display/DOC/Masternode>.
2. Seesaw Reward Balance System Whitepaper. Revision 0.7e, January 24, 2017 <https://pivx.org>.

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