# DEQUANT

DEQUANT is the first Matsernode Coin for the security of its masterternodes based on quantum technology.
The DEQUANT offers the entire Masternodes unrivaled protection through quantum technology.

Whitepaper v1.1

# 1. What is Dequant?

The approach of DEQUANT is to solve this problem with a quantum computer to protect all Masterternodes.

Quantum offers us a powerful mechanism. There is still no Coin that protects your Masterternodes on Quantum level.

The quantum computer has long been a predominantly theoretical concept. There are several suggestions on how a quantum computer could be realized and on a small scale, some of these concepts were tested in the laboratory and quantum computers with a few qubits were realized.
In addition to the number of qubits, however, it is also important, for example, to have a low error rate for calculating and reading, and for how long can the states in the qubits be maintained. Currently (2018), many large computer companies invest in the development of quantum computers and the record is around 50 to 70 qubits.

In the framework of complexity theory, algorithmic problems are assigned to so-called complexity classes. The best known and most important representatives are the classes P and NP. Where P denotes those problems whose solution can be calculated deterministically in terms of the input length of polynomial propagation time. NP has the problems to which there are solution algorithms that are non deterministically polynomial. Non-determinism allows to test different possibilities at the same time. Since our current computers are deterministic, non-determinism needs to be simulated by sequencing the different possibilities whereby the polynomiality of the solution strategy can be lost.

## 2. Why cryptocurrency

There are nowadays several electronic payment systems that replace the tokens but the blockchain technology for this purpose offers many more benefits.

## 2.1. Privacy

With the conventional electronic payment systems, information on each transaction is traceable and hence users have many concerns about their privacy. It is in other words possible that someone can get access to the information on each transaction you make during the party. With crypto-technology, big brother will not be able to watch you anymore. You buy and sell without any concern for your privacy.

## 2.2. Algorithmus

The need for lightweight (that is, compact, low-power, low-energy) cryptographic hash functions has been repeatedly expressed by professionals, notably to implement cryptographic protocols in RFID technology. At the time of writing, however, no algorithm exists that provides satisfactory security and performance. The ongoing SHA-3 Competition will not help, as it concerns general-purpose designs and focuses on software performance. This paper thus proposes a novel design philosophy for lightweight hash functions, based on the sponge construction in order to minimize memory requirements. Inspired by the stream cipher Grain and by the block cipher KATAN (amongst the lightest secure ciphers), we present the hash function family Quark, composed of three instances: u-Quark, d-Quark, and sQuark. As a sponge construction, Quark can be used for message authentication, stream encryption, or authenticated

encryption. Our hardware evaluation shows that Quark compares well to previous tentative lightweight hash functions. For example, our lightest instance u-Quark conjecturally provides at least 64-bit security against all attacks (collisions, multicollisions, distinguishers, etc.), fits in 1379 gate-equivalents, and consumes in average 2.44 $\mu$W at 100 kHz in 0.18 $\mu$m ASIC. For 112-bit security, we propose s-Quark, which can be implemented with 2296 gate-equivalents with a power consumption of 4.35 $\mu$W.

## 2.3 Problem Definition

First, quantum computing offers us the prospect of a technologically advanced world, as is already the case today.

Quantum technology can overcome many hurdles in machine learning.

On the other side is Quantum Computing introduce large security risks The decryption of today's computer-aided communication would not be a challenge anymore. Whether passwords of e-mail accounts, bank accounts, the security of today's systems would have to be completely questioned. Thus, also this revolutionary technology turns Cyber security on the head.

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## 3. Technical specifications

## 3.1 What is a Masternode

A masternode is a computer permanently connected to the internet running a full blockchain node. Every masternode keeps a full copy of a blockchain in real time. Masternodes fulfill different functions in a coin's transaction network, such as ensuring privacy of transactions, enabling instant transactions, or participating in governance. For the functions they perform, masternodes receive incentives or rewards.

## 3.2 Shared Master-nodes

Another innovation that guarantees more decentralization and equity, and hence more currency stability is the technology that allows investors to pool together and invest in master-nodes. Like that, people who own
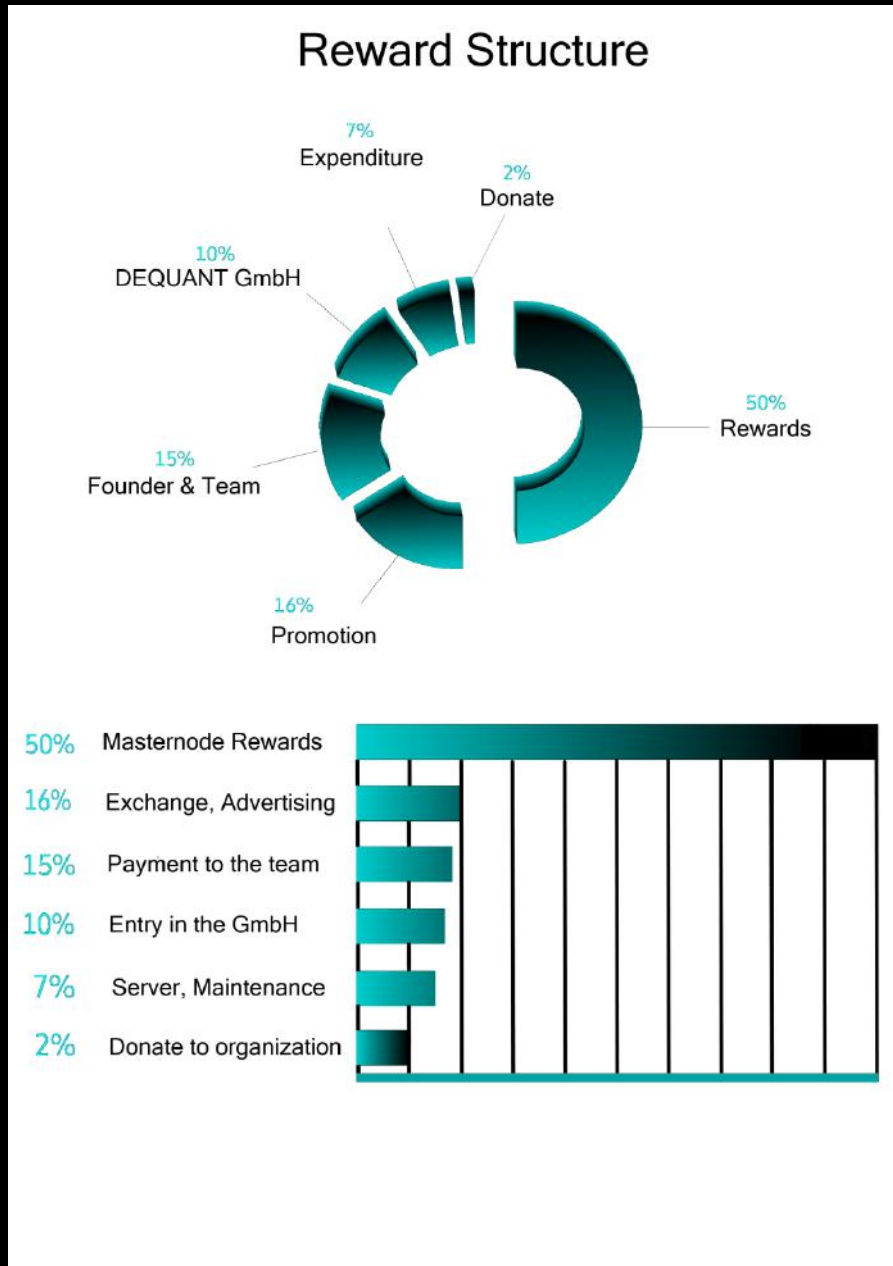
## 3.3 Wallet Design
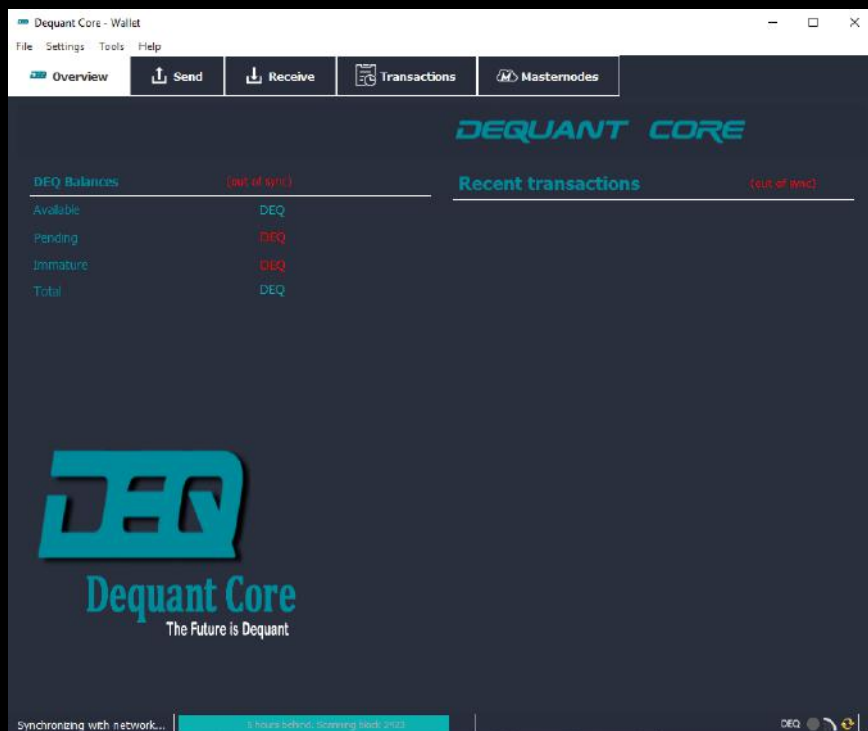


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## 4. Our Philosophy

We believe in the fact that human affairs are better managed when the decision making is decentralized whereby people become co-decision makers, which results in harmony and better societal outcomes. More decentralization also means more stability and better protection of privacy.
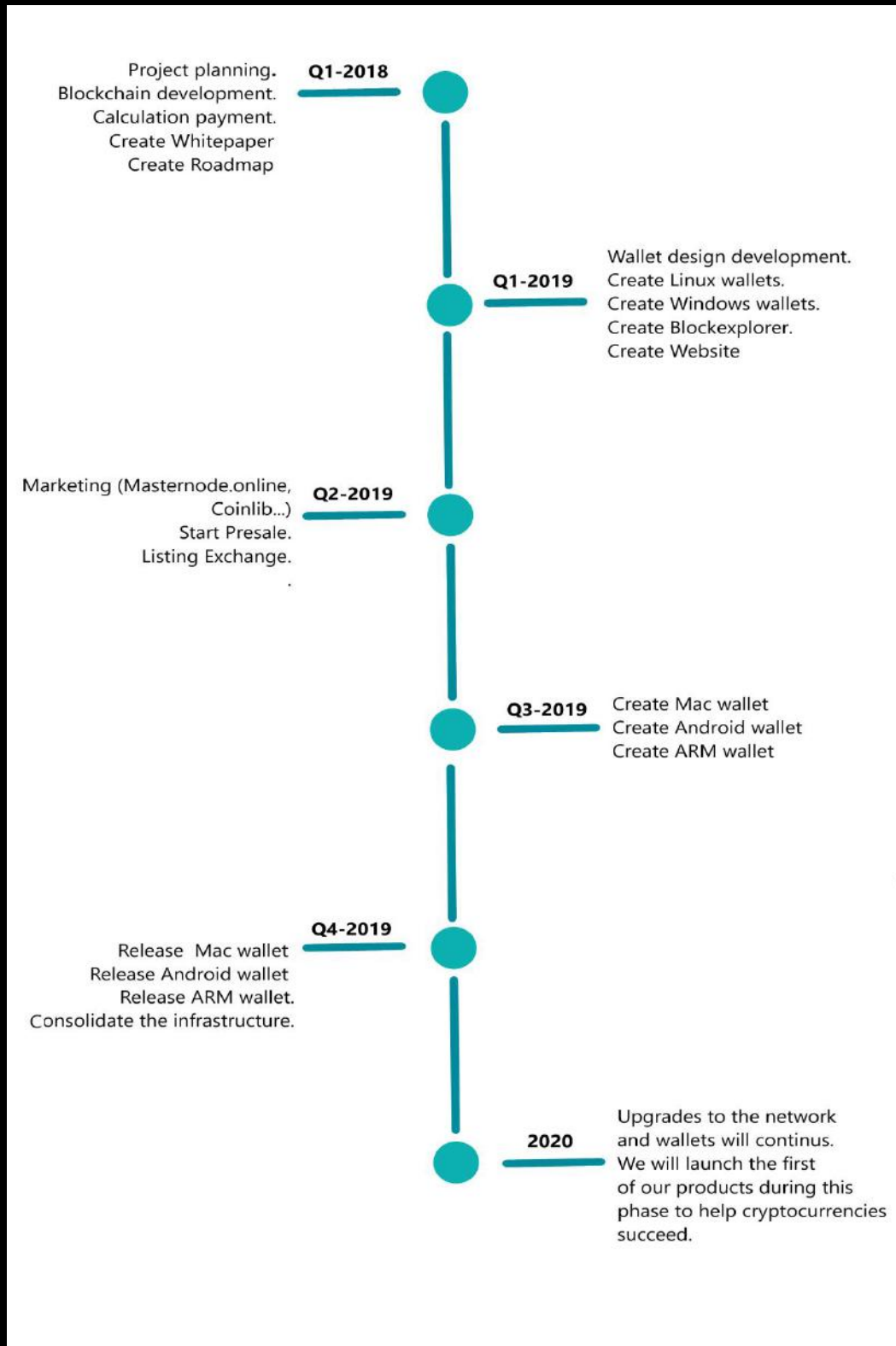
# 5. Coin infrastructure

## 5.1 Coin distribution

### Reward Structure

7%
Expenditure

2%
Donate

10%
DEQUANT GmbH

50%
Rewards

15%
Founder & Team

16%
Promotion

| | | |
|---|---|---|
| 50% | Masternode Rewards | |
| 16% | Exchange, Advertising | |
| 15% | Payment to the team | |
| 10% | Entry in the GmbH | |
| 7% | Server, Maintenance | |
| 2% | Donate to organization | |

# 5.2 Roadmap

**Q1-2018**
Project planning.
Blockchain development.
Calculation payment.
Create Whitepaper
Create Roadmap

**Q1-2019**
Wallet design development.
Create Linux wallets.
Create Windows wallets.
Create Blockexplorer.
Create Website

**Q2-2019**
Marketing (Masternode.online, Coinlib...)
Start Presale.
Listing Exchange.

**Q3-2019**
Create Mac wallet
Create Android wallet
Create ARM wallet

**Q4-2019**
Release Mac wallet
Release Android wallet
Release ARM wallet.
Consolidate the infrastructure.

**2020**
Upgrades to the network
and wallets will continus.
We will launch the first
of our products during this
phase to help cryptocurrencies
succeed.

# 5.3 Pre-Sale

| | |
|---|---|
| Sale period: | Q2 2019 |
| Accepted CRYPTO: | BTC |
| Accepted FIAT: | - |
| Minimum contribution amount: | 0.5 BTC |
| Maximum cap: | - |
| Exchange rate: | 1 USD = 2,6 DEQ<br>1 DEQ = 0.38 USD (After current BTC course) |
| Coins Lock: | 20.000.000 DEQ |
| Required coins for masternode: | 5000 DEQ |

## 5.4 Coin information

| | |
|---|---|
| TPYE: | POS / MN |
| Coin name: | DEQUANT |
| Coin Symbol: | DEQ |
| Algo: | Quark |
| Rewards: | MN (80%) PoS (20%) |
| MAX COIN SUPPLY: | 40.000.000 DEQ |
| Coin Lock: | 20.000.000 DEQ |
| MN REQUIRED COINS: | 5000 |
| Block Time: | 90 Seconds |

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## 6. Reward structure

# Rewards

| Start | Stop | REWARD/Block | Total Blocks |
|---|---|---|---|
| 0 | 10,000 | 8 Coins | 80,000 |
| 10,000 | 20,000 | 13 Coins | 130,000 |
| 20,000 | 30,000 | 18 Coins | 180,000 |
| 30,000 | 40,000 | 16 Coins | 160,000 |
| 40,000 | 50,000 | 17 Coins | 170,000 |
| 50,000 | 60,000 | 22 Coins | 220,000 |
| 60,000 | 70,000 | 24 Coins | 240,000 |
| 60,000 | 80,000 | 28 Coins | 560,000 |
| 80,000 | 100,000 | 30 Coins | 600,000 |
| 100,000 | 120,000 | 35 Coins | 700,000 |
| 120,000 | 140,000 | 42 Coins | 840,000 |
| 140,000 | 160,000 | 48 Coins | 960,000 |
| 160,000 | 180,000 | 57 Coins | 1,140,000 |
| 180,000 | 190,000 | 63 Coins | 630,000 |
| 190,000 | 200,000 | 60 Coins | 600,000 |
| 200,000 | 210,000 | 55 Coins | 550,000 |
| 210,000 | 220,000 | 50 Coins | 500,000 |
| 220,000 | 230,000 | 45 Coins | 450,000 |
| 230,000 | 240,000 | 40 Coins | 400,000 |
| 240,000 | 250,000 | 35 Coins | 350,000 |
| 250,000 | 265,000 | 30 Coins | 450,000 |
| 265,000 | 285,000 | 25 Coins | 375,000 |
| 285,000 | 300,000 | 20 Coins | 300,000 |
| 300,000 | 400,000 | 15 Coins | 1,500,000 |
| 400,000 | 500,000 | 10 Coins | 1,000,000 |
| 500,000 | 600,000 | 6 Coins | 600,000 |
| 600,000 | 1,000,000 | 5 Coins | 2,000,000 |
| 1,000,000 | End | 5 Coins | |

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# 7. Blockchain Explorer

**Dequant Core**

The Future is Dequant