



ORME

ORMEUS COIN

WHITE PAPER

VERSION 1.2



(ORME)
ORMEUS COIN

BUILDING ON THE GOLD STANDARD OF CRYPTOCURRENCY

ABSTRACT

Ormeus Global announces the release of Ormeus Coin (asset symbol 'ORME'). The real-world value of this new token is secured and cryptographically linked to a publicly verifiable reserve of Bitcoin, the 'gold standard' of cryptocurrency¹. The bitcoin reserve known as the Ormeus Reserve Vault (hereafter "ORV") is a multisignature Bitcoin wallet funded by the ongoing industrial bitcoin mining operations of Ormeus Global. These operations have an initial baseline hashing power of 30 PH/s. This hashrate will be continuously upgraded by allocating proceeds derived from the sale of ORME tokens. Unlike other static or semi-static bitcoin-backed cryptocurrencies (which are historically highly speculative in nature and backed by token sales alone) Ormeus Coin will be backed both by token sales and a geographically diverse industrial cryptocurrency mining operation. This predefined mechanism to facilitate the continual accumulation of hashing power will result in the ORV having a constantly increasing reserve store of bitcoin which effectively distinguishes ORME as a stable store-of-value.



1: "Why Bitcoin is the new gold - Business Insider." 29 Jan. 2017.
<http://www.businessinsider.com/why-bitcoin-is-the-new-gold-btcc-2017-1>. Accessed 25 Aug. 2017.



1 INTRODUCTION

In 2008, the paper: "Bitcoin: A Peer-to-Peer Electronic Cash System" penned by the pseudonymous Satoshi Nakamoto appeared online. By now, all know of Nakamoto's historic achievement: he married the mathematical science of cryptography with the digital world to create what we now know as blockchain technology. Over the last few years the world has started to grasp the full scope of Nakamoto's genius as the applications of Bitcoin's blockchain technology filter from the fringes into the mainstream. Indeed, blockchain has gone from an interesting but obscure concept to the premiere financial technology du jour explored by the likes of Dell, Microsoft, Google, Goldman-Sachs & J.P. Morgan² and other major financial and investment companies for its ability to facilitate secure, encrypted, decentralized and anonymous transactions directly (without intermediaries) between parties .

Since the advent of that first white paper exploring the realms of digital cash and the blockchain and its application to the creation of digital currency, numerous coins and tokens have been created. To date, none have surpassed the popularity of the first, Bitcoin.

Bitcoin (BTC) is considered the "gold standard" of cryptocurrency³. The first BTC transaction from Nakamoto to Hal Finney occurred on January 9, 2009. Since then, approximately 240,000,000 BTC transactions have taken place around the world. BTC can be used for purchases ranging from a new Dell computer to a box of groceries from Whole Foods Market or saved in a virtual wallet until the owner is ready to sell, exchange it for another currency, or buy something new. Bitcoin has become its own currency in a new world that sees no bank, no government, as the ultimate authority and arbiter of its currency. In this brave new Bitcoin world, people ARE their own bank; each of us has the potential to become our own source of security.

It is into this world that a new coin appears: Ormeus Coin. The name Ormeus is a play on the Medieval alchemist's term, orme, which refers to turning base metal into gold. From archeological finds, biblical references, the recorded histories of ancient Egypt and others dated conservatively from the 5th millennium BC⁴ through today, gold was and continues to be a desirable currency and



2: "Goldman, JPMorgan to invest in blockchain startup..." 19 Dec. 2016.
<http://www.reuters.com/article/us-axoni-blockchain-idUSKBN149073> Accessed 27 Aug. 2017

3: "As Bitcoin Becomes New Gold, Ex Fed Chairman Calls for Return to" 22 Feb. 2017.
<https://cointelegraph.com/news/as-bitcoin-becomes-new-gold-ex-fed-chairman-calls-for-return-to-gold-standard>. Accessed 25 Aug. 2017.

4: "Gold: History" 24 Aug. 2017.
<https://en.wikipedia.org/wiki/Gold#History>, Accessed 27 Aug. 2017



store of value worldwide. For centuries, people sought gold for its beauty and scarcity, which in turn made it valuable. The earth yielded its gold reluctantly, and only at great cost; time, effort, and strength were required to wrest this precious metal from the earth and refine it to its soft sheen.

Gold became the coin of the realm, the object to barter if you needed to purchase food, a night's lodging, a new horse, a home. Gradually, gold was replaced with paper currency as well as other base coins, made from metals such as nickel and silver, which were valuable, although never as valuable as gold. Paper currency, backed by gold, symbolized the value of a bar of gold but was easier to carry for the average person. As recently as 1973, paper money in the United States was "pegged" to gold. In other words, the 'gold standard' both ensured and insured the value of paper currency. When the U.S. dollar and other global currencies were divorced from the gold standard, problems emerged. Inflation (a decline in the real-world purchasing power) began to devalue money; people found the dollar wouldn't stretch as far as it once did. The gold standard, with its promise of security, of solidity, of backing - this is what gave paper money its intrinsic value.

What if, among the world of emerging cryptocurrencies, a new "gold standard" emerged?

That gold standard is, of course, Bitcoin. Due to the ongoing decline in value caused by inflation of standard world currencies, Bitcoin has continued to rise inexorably from 10¢ around the time of its launch to all-time highs of over \$4,500⁵ (as of this writing). Not surprisingly, it is expected to climb even higher in the coming months and years⁶. As other cryptocurrencies within the marketplace scramble for acceptance and relevance within the community (and the world at large), it continues to be Bitcoin that analysts from companies such as Goldman Sachs⁷ and other major banks, financial news networks⁸ and media cite as an example, rubric and yardstick by which the others are measured. Bitcoin sets the bar high and others strive to reach it. Ormeus Coin (ORME) is a new cryptocurrency secured, backed and cryptographically linked to the gold standard of crypto: Bitcoin.



⁵ "Bitcoin Prices Reach New All-Time High of Over \$4,500 - CoinDesk." 17 Aug. 2017, <https://www.coindesk.com/bitcoin-prices-reach-new-all-time-high-of-over-4500/>. Accessed 25 Aug. 2017.

⁶ "Bitcoin price could hit \$100,000 in 10 years, says analyst - CNBC.com." 31 May. 2017, <https://www.cnbc.com/2017/05/31/bitcoin-price-forecast-hit-100000-in-10-years.html>. Accessed 25 Aug. 2017.

⁷ "Here's What Goldman Is Telling Big Money Clients About ... - Bloomberg." 9 Aug. 2017, <https://www.bloomberg.com/news/articles/2017-08-09/here-s-what-goldman-is-telling-big-money-clients-about-bitcoin>. Accessed 25 Aug. 2017.

⁸ "Bitcoin Skeptic Mark Cuban to Invest in Cryptocurrency ... - Bloomberg." 22 Aug. 2017, <https://www.bloomberg.com/news/articles/2017-08-22/bitcoin-skeptic-mark-cuban-to-invest-in-cryptocurrency-fund>. Accessed 25 Aug. 2017.

Benefits of Ethereum

In the Ethereum Whitepaper, Vitalik Buterin (the inventor of Ethereum) writes that Ethereum is designed to improve upon the pre-existing (Bitcoin and other cryptocurrencies) concepts of scripting, altcoins, and on-chain meta-protocols. These improvements allow developers to create arbitrary consensus-based applications that have the robust scalability, standardization, feature-completeness, ease of development and interoperability offered by these different paradigms all at the same time. Ethereum accomplishes this by building a foundational layer that contains a built-in Turing-complete programming language that allows anyone to write smart contracts and decentralized applications where they can create their own rules and functions. Smart contracts are cryptographic “boxes” that serve a purpose or contain value. Smart contracts are locked until a predefined condition has been met. While Bitcoin offers similar functions, Ethereum’s smart contracts are more powerful due their Turing-awareness, value-awareness and blockchain awareness capabilities.

Ormeus Coin - A Synthesis of Both

Ormeus Coin will be backed by Bitcoin and company revenue. Unlike other cryptocurrencies that are pegged to the value of Bitcoin, Ormeus Coin already has Bitcoin and BlockBox Bitcoin mining rigs that will back the token. One BlockBox Bitcoin mining rig is capable of producing \$500,000 of Bitcoin every 30 days. Ormeus Coin is currently in possession of two BlockBox Bitcoin mining rigs and will be purchasing more as time progresses. 40% of all Bitcoin generated by the BlockBox mining rigs will be reinvested into purchasing more. Ormeus will be providing a way for token holders to profit off of both the increase in Bitcoin value and the company revenue. Ethereum based smart contracts will contain predefined quantities of Bitcoin from the Bitcoin mining profits. Ormeus tokens will act as keys that will unlock corresponding smart contracts that contain Bitcoin. All Ormeus Coin activity and smart contracts can be viewed and confirmed on the public ledger in order to provide transparency and security to Ormeus Coin holders.

The synthesis of the powerful attributes of Bitcoin as a reliable cryptocurrency with a proven track record along with Ethereum’s revolutionary smart contract capabilities is the solid foundation for Ormeus Coin which will allow continued scalable, and self-propelling growth far into the future.



4 HOW ORMEUS COIN IS BUILT

Ormeus Coin is built as an ERC-20 Compliant token on the Ethereum blockchain. The Ormeus mining rig servers are located in Hong Kong. The company has invested heavily into state of the art, industrial-scale mining rigs and staff to ensure smooth transactions with Ormeus Coin (ORME).

The ORME Enhanced Smart Contract (currently in development) will provide built-in functions to support:

- Ⓞ Verification of regular mining deposits from the Ormeus mine that serves as a "Proof of Mining" to validate the ongoing robust operation of the Ormeus mining operations.
- Ⓞ On-demand verification of the Ormeus Reserve Vault (ORV) BTC balance through direct query of the Bitcoin blockchain showing the total available reserve.
- Ⓞ Functionality to "lock" and "unlock" the bitcoin deposited to the ORV by the Ormeus Miners.



SPECIFICATIONS

HASH RATE	11.5TH/s, 12.5TH/s, 13TH/s, 13.5TH/s & 14TH/s, depending on batch. Variation of $\pm 5\%$ is expected
POWER CONSUMPTION	1127W (11.5TH/s batch), 1225W (12.5TH/s batch), 1274W (13TH/s batch), 1323W (13.5TH/s batch), 1372W (14TH/s batch) (at the wall, with Bitmain's APW3 PSU, 93% efficiency, 25°C ambient temp). Expected discrepancy of +10%
POWER EFFICIENCY	0.098 J/GH +10% at the wall (with Bitmain's APW3 PSU, 93% efficiency, 25°C ambient temp)
RATED VOLTAGE	11.60 ~13.00V
CHIP QUANTITY PER UNIT	189x BM1387
DIMENSIONS	350mm(L) x 135mm(W) x 158mm(H)
COOLING	2x 12038 fans; Front fan: 6000rpm, Rear fan: 4300rpm
OPERATING TEMPERATURE	0°C to 40°C
NETWORK CONNECTION	Ethernet
FREQUENCY	Automatically set



5 ROADMAP

The following table displays the main objectives which make up the core development roadmap for Ormeus Coin along with the corresponding timeframe targets (represented in quarters of the year such that "Q1-2017" is January through April of 2017, and so on). The current status of each respective item is also presented as either "complete" or "pending".

	OBJECTIVE	TIMEFRAME	STATUS
2017	Build and initialize ERC-20 Ethereum token, "ORME"	Q1-2017	COMPLETE
	Assemble the core team and design the Ormeus brand	Q1-2017	COMPLETE
	Deploy baseline mining infrastructure of 30 PH/s	Q2-2017	COMPLETE
	Construct and implement Ormeus Reserve Vault (ORV)	Q2-2017	COMPLETE
	Develop and release enhanced ORME smart contract	Q3-2017	PENDING
	Launch the ORME Initial Coin Offering	Q3-2017	PENDING
	Public Exchange Listing	Q4-2017	PENDING
	CoinMarketCap.com Listing	Q4-2017	PENDING
2018	30 Petahash	Q4-2017	PENDING
	60 Petahash	Q1-2018	PENDING
	Ormeus ATM	Q2-2018	PENDING
	Ormeus Debit Card	Q2-2018	PENDING
	100 Petahash	Q2-2018	PENDING
	AltCoin Smart Contract	Q3-2018	PENDING
	150 Petahash	Q3-2018	PENDING
2020	Custom Branded Wallet	Q4-2018	PENDING
	250 Petahash	Q4-2018	PENDING
	1% ORME Foundation Charity Profit Donation	Q4-2020	PENDING
	2% ORME Foundation Charity Profit Donation	Q4-2021	PENDING
	4% ORME Foundation Charity Profit Donation	Q4-2022	PENDING



6 TECHNICAL SPECIFICATIONS

Ormeus Coin is an ERC-20 token⁹ which is built upon the Ethereum¹⁰ blockchain. This specific classification of token has a fairly standardized protocol best practices which can be reviewed at length in the official ERC-20 token standard guidelines.

Ormeus Coin Ethereum contract wallet address:

0x516E5436bAfdC11083654DE7Bb9b95382d08d5DE

Ormeus Coin was created with the following transaction:

0xb259f99639bb16848f370b14c358d8e17d1c70cc99cca9984bcac78f946c3b76

The Ormeus Coin creation transaction was added to the Ethereum blockchain at block

#4110554.

The following table of technical specifications for Ormeus Coin can be viewed and verified with the EtherScan¹¹ tool located here:

<https://etherscan.io/token/0x516e5436bafdc11083654de7bb9b95382d08d5de>

ORMEUS COIN TECHNICAL SPECIFICATIONS

BLOCKCHAIN PLATFORM	Ethereum
CONTRACT TYPE	ERC-20
TICKER SYMBOL	ORME
COIN NAME IN FULL	Ormeus Coin
ISSUER NAME	Ormeus Global
IMAGE (48X48 & 260X260, PNG)	PENDING
DIVISIBILITY (DECIMAL PLACES)	8
INITIAL ISSUE AMOUNT	200,000,000



9: "ERC20 Token Standard - The Ethereum Wiki." 21 Mar. 2017.
https://theethereum.wiki/w/index.php/ERC20_Token_Standard. Accessed 26 Aug. 2017.

10: "Ethereum Project."
<https://www.ethereum.org/>. Accessed 26 Aug. 2017.

11: "EtherScan."
<https://etherscan.io/>. Accessed 27 Aug. 2017.

7 PRIVACY & SECURITY

The elements of privacy and security are of key importance and priority in the realm of blockchain and many of the various implementations of the technology exhibit a diverse range of methodology and schools of thought.

Privacy

Often the notion that blockchain-based assets contain automatic anonymity is talked about and is, quite frankly, not often the case. The implementation of ring signatures¹² (such as the cryptonote-based blockchain Monero), while having various potential weakness is one of the strongest privacy protecting measures yet discovered in the blockchain space. The blockchains which have strong privacy protection unfortunately lend themselves to being used for nefarious purposes such as the popular¹³ Monero mining malware. These negative applications are ones which Ormeus Coin effectively avoids by operating on the Ethereum Blockchain as an ERC-20 token. While complete and total anonymity is not available using the Ethereum blockchain, this does not mean that privacy is not available. In fact, with both the Ethereum and Bitcoin blockchains, wallet addresses contain no explicit PII (Personally Identifiable Information). This helps to ensure a reasonable balance between the security of privacy and accountability of transparency.

All transactions performed in Ormeus Coin are clearly visible and the balance totals of all Ormeus Coin owners is clearly visible. To view a list of the top Ormeus Coin wallets (also known as the "rich list"), navigate to the EtherScan page located at the following address:

<https://etherscan.io/token/tokenholderchart/0x516e5436bafdc11083654de7bb9b95382d08d5de>

To read more about privacy as it relates to blockchain technology, read this article written by Vitalik Buterin, the founder of Ethereum: Privacy on the Blockchain.¹⁴

Security

Ormeus Coin is fully secured with the same standards as are employed by the Ethereum blockchain. The primary principles behind Ethereum security leverage the technology of public key cryptography^{15 16 17} to carry out all manner of functions. This form of cryptography is implemented in numerous ways to accomplish the desired functions of the smart contract.

To read more about Ethereum security methods and best practices recommendations, read the GitHub guide by ConsenSys.¹⁸



12: "Ring Signatures - UMD Department of Computer Science - University
https://www.cs.umd.edu/~jkatz/papers/ring_sigs.pdf. Accessed 26 Aug. 2017.

13: "Cryptomining Malware on NAS Servers"
<https://www.sophos.com/en-us/medialibrary/PDFs/technical%20papers/Cryptomining-malware-on-NAS-servers.pdf>. Accessed 26 Aug. 2017.

14: "Privacy on the Blockchain - Ethereum Blog." 15 Jan. 2016.
<https://blog.ethereum.org/2016/01/15/privacy-on-the-blockchain/>. Accessed 25 Aug. 2017.

15 "Public Key Cryptography : nrich.maths.org."
<https://nrich.maths.org/2200>. Accessed 27 Aug. 2017.

16 "Understanding Public Key Cryptography - TechNet - Microsoft." 19 May. 2005.
[https://technet.microsoft.com/en-us/library/aa998077\(v=exch.65\).aspx](https://technet.microsoft.com/en-us/library/aa998077(v=exch.65).aspx). Accessed 27 Aug. 2017.

17 "Public Key Encryption - TutorialsPoint."
https://www.tutorialspoint.com/cryptography/pdf/public_key_encryption.pdf. Accessed 27 Aug. 2017.

18 "GitHub - ConsenSys/smart-contract-best"
<https://github.com/ConsenSys/smart-contract-best-practices>. Accessed 27 Aug. 2017.

8 SECURED BY THE GOLD STANDARD OF BITCOIN

The value of ORME is backed by the “gold standard” of cryptocurrencies, Bitcoin. The Ormeus Reserve Vault (ORV) is a multisignature Bitcoin wallet address where mined bitcoin from the Ormeus Mine is deposited as a backing security for the ORME currency. The ORME Enhanced Smart Contract locks up the bitcoin in the ORV using existing bitcoin protocol opcodes. All bitcoin produced by the Ormeus Mine will be deposited directly to the ORV.

9 ORMEUS COIN OFFERING

The Ormeus Coin offering is a private coin offering.

10. CONCLUSION

This white paper began by covering a brief overview of the historical foundations of monetary exchange and the many challenges presented by the traditional systems of money, followed by a description of how Ormeus Coin connects into this timeline of money and how Ormeus Coin will provide a newer and more modern solution to some of the age-old challenges faced by the old currency systems. Next, a general introduction to Ormeus Coin was given along with an overview of the production process and issuance of tokens. Then we examined the official development roadmap which describes those tasks which have been completed and those which are pending. We also examined the technical nature of Ormeus Coin as being a fully compliant ERC-20 Ethereum token and we examined the elements of privacy and security which are provided in the Ormeus Coin smart contract token. Then finally we discussed the bitcoin backing of Ormeus Coin



