

Forum:[Hack Forums](#)

Thread: [Kadena-\\$KDA - Layer 1 - PoW Chain - Sharded Network.](#)

?OMEGA? - May 14, 2022, 4:22 pm

Kadena-\$KDA

Kadena's public blockchain, Chainweb, is the only sharded and scalable layer-1 PoW network in production today. It utilizes a PoW (Proof of Work) consensus mechanism that improves throughput and scalability without sacrificing security.

Image is from 2021.

Links:

<https://kadena.io/>

<https://docs.kadena.io/>

<https://kadena.io/ecosystem/>

<https://www.coingecko.com/en/coins/kadena>

What Is Kadena (KDA)?

Quote:Kadena is a proof-of-work blockchain that combines the PoW consensus mechanism from Bitcoin with directed acyclic graph (DAG) principles to offer a scalable version of Bitcoin. Kadena claims it can provide the security of Bitcoin while being able to offer unparalleled throughput that makes the blockchain usable to enterprises and entrepreneurs alike. Kadena's unique infrastructure is decentralized and built for mass adoption because of its multi-chain approach.

Kadena promises industrial scalability that can support global financial systems and can be scaled as necessary. It also vows to remain energy-efficient at scale and deliver more transactions with the same energy input, another difference to Bitcoin. Moreover, Kadena offers crypto gas stations, which allow businesses to pay for their customers' gas fees and remove a massive pain point in adopting blockchains for business.

What Makes Kadena Unique?

Quote:Kadena offers a public proof-of-work blockchain with unparalleled throughput by combining two separate consensus mechanisms: DAG and proof-of-work.

In simple terms, Kadena achieves this by braiding chains together, meaning it offers not one but several (20) separate blockchains that all work simultaneously and asynchronously to validate transactions. This allows Kadena to mint multiple blocks simultaneously, thus increasing its throughput. This also increases security by reducing an attacker's time between block confirmations.

Kadena uses a directed acyclic graph structure to scale from one proof-of-work blockchain to theoretically an unlimited amount. However, its DAG structure is fixed and multi-channel, meaning Kadena's blockchains only communicate with three peer chains instead of randomly confirming transactions. This improves real-world performance and scalability.

Kadena can scale as required by the needs of its users. However, the main limitation is adoption, as scaling and adding additional blockchains requires the network to undergo a hard fork. In theory, Kadena can scale to 50 or 100 blockchains or even more if it demonstrates continued adoption. The process is not automatic though: once the network becomes congested, fees rise and miners

forming a DAO are incentivised to cooperate in reconfiguring the network to a larger size.

Who Are the Founders of Kadena?

Quote:Kadena was founded in 2016 by Stuart Popejoy and Will Martino. Stuart Popejoy led JPMorgan's Emerging Blockchain group before founding Kadena and has 15 years of experience building trading systems and infrastructure in finance. Will Martino was the Lead Engineer for JPMorgan's blockchain prototype Juno and led the Securities and Exchange Committee's Cryptocurrency Steering Committee and Qualitative Analytics Unit. Another key persona in founding Kadena was Dr. Stuart Haber, who is the co-inventor of blockchain technology and the most cited author in the Bitcoin whitepaper.

Furthermore, Kadena raised capital from a number of crypto venture capitalists like Multicoïn Capital, CoinFund, Amino Capital, and others.

What are your thoughts on kadena and why.

I've started to fill up some bags with it. I see this as a very promising project. Because i'm tired of all the worthless PoS Projects.

All the information on this thread is quoted from CMC & Whitepaper.

Lilith - May 14, 2022, 6:43 pm

It's been on my watchlist for a bit now but I haven't looked much into the nitty gritty of the claims they make. Chainweb is an interesting concept, at the very least. Though, there's few crypto demographics that I've found more annoying in recent months than Kadena fans. I think most of the people I have blocked on Reddit are people who's only contribution to the conversation was them chiming in with, "But Kadena can do this!"

Further reading for others:

<https://medium.com/kadena-io/how-to-scale-a-proof-of-work-blockchain-9233e5b4b62>

https://www.reddit.com/r/kadena/comments/raw6uj/exploit_alert_be_extra_careful_when_transferring/

<https://www.coindesk.com/business/2022/04/21/kadena-launches-100m-grant-fund-to-support-early-stage-builders/>

<https://medium.datadriveninvestor.com/kadena-ethereum-competitor-with-a-lot-of-upside-potential-kda-analysis-6722207d4b0e>

Life - May 15, 2022, 1:58 am

bought a big chunk of KDA @ \$1.40 and have DCA's set for lower prices, taking some profit off the table last night and today and letting it ride. got most of my investment back on it so it can do whatever now

?OMEGA? - May 15, 2022, 3:17 am

(May 14, 2022 09:50 PM)Focus Broken Wrote: [\[CITE\]](#) The block time on Ethereum is 13.5 seconds and the block time on Litecoin is 2 and a half minutes, not 60 seconds. Their TPS calculation is wrong for LTC vs BTC as well, since Litecoin has 1/2 the block size limit of Bitcoin with 1/4 of the block time, giving it double the total max block space of BTC.

I don't know much about DAGs, can you explain more about what is innovative about them and what tradeoffs come with them? I'm not going to simply dismiss the claim of a theoretically unlimited

scaling since Bitcoin's lightning network is theoretically unlimited.

But I do know that having multiple chains isn't really any different from having bigger blocks. Your node still has to validate every chain to make sure they aren't cheating, it's doesn't allow you to skip the basic bandwidth requirements of validating every on chain transaction yourself.

Faster block time is marginally lower security because it increases orphan rates.

Can you explain more about "miners forming DAO are incentivised to cooperate in reconfiguring the network to a larger size"? Hard forks are when previously invalid blocks are now considered valid, and requires all miners and nodes to switch simultaneously in order to prevent a chain split. If miners can hard fork the network, that creates dangerous positive incentive feedback loops and puts non mining users at their mercy.

??

Not worlds most tech savy person but i've read a good bit of the whitepaper and will quote from there to some of the questions mate.

Block Times

Quote:Subsequent studies wherein various Chainweb configurations are simulated are needed to fully explore this subject. The primary aspect to explore is how shorter block times (subminute) impact the ability to achieve new layer consensus in a given configuration. If the chain fork rate is too high, it will degrade overall network throughput and efficiency. Base graph degree will likely impact new-layer consensus. Simulations are needed to find the right balance between confirmation latency (base graph diameter and block time) and new layer consensus efficiency (block time and degree).

We estimate that 30-second block times are feasible, and 15- and even 5-second block times may be possible as well. Given that production Chainweb implementations will likely favor diameter-4 or -5 base graphs, 30-, 15- and 5-second block times would represent average confirmation latencies of 120-150 seconds, 60-75 seconds, and 20-25 seconds respectively, while supporting network throughput of over 10,000 transactions per second. Under load and assuming that 5 second block times are feasible, a Chainweb network could achieve a lower practical latency (e.g. the time from 100,000 transactions between Alice and Bob entering the memory pool to each being confirmed) than any network using known deterministic consensus mechanisms.

Conclusion

Quote:In conclusion, Chainweb provides significant advances over existing approaches in scalable public blockchain. It provides unparalleled increases in PoW throughput while keeping the global hashrate, and thus energy required, constant. The confirmation latency of Chainweb is also significantly decreased from traditional PoW and is potentially even lower than that of PoS systems. Chainweb achieves these advances while maintaining the core trustless, decentralized nature of PoW. This protocol enables greater practical decentralization and enables the creation of an ecosystem where enterprises, individual users, and large mining pools can co-exist peacefully by acting selfishly. Chainweb avoids liquidity and centralization problems associated with using staked channels for scaling while also staying in the existing global regulatory context. We present in Chainweb as a solution by which PoW can be scaled such that it supports true decentralized economy.

Will update for some of the others. I have to go to a meeting now. I was waiting for you to reply as i wanted your thoughts specifically on this project.

I'm done with PoS projects.

I'm stacking up on.

BTC, Flux & Kadena.

Pisna16 - May 15, 2022, 4:14 am

(May 14, 2022 04:22 PM)?OMEGA? Wrote: [\[CITE\]](#) Kadena-\$KDA

Kadena's public blockchain, Chainweb, is the only sharded and scalable layer-1 PoW network in production today. It utilizes a PoW (Proof of Work) consensus mechanism that improves throughput and scalability without sacrificing security.

Image is from 2021.

Links:

<https://kadena.io/>

<https://docs.kadena.io/>

<https://kadena.io/ecosystem/>

<https://www.coingecko.com/en/coins/kadena>

What Is Kadena (KDA)?

What Makes Kadena Unique?

Who Are the Founders of Kadena?

What are your thoughts on kadena and why.

I've started to fill up some bags with it. I see this as a very promising project. Because i'm tired of all the worthless PoS Projects.

All the information on this thread is quoted from CMC & Whitepaper.

It's my top pick followed by Flux, hope the price will go down again

?OMEGA? - May 15, 2022, 4:52 am

(May 15, 2022 04:14 AM)Pisna16 Wrote: [\[CITE\]](#) It's my top pick followed by Flux, hope the price will go down again

Yeah i've got 2000 Flux bought in at \$2.30 xD

Now i'm stacking up on kadena aswell.

I'm fucking done with PoS projects.

SUI-3183372 - May 15, 2022, 9:18 am

I've never been a fan of Kadena. I'm constantly seeing their claims of throughput, speed, etc being debunked as clever marketing/outright lies. For example, can Kadena actually reach 480k transactions without the utilization of Kuro? If not, that's similar to saying ETH's TPS is equivalent to whatever its layer 2's can offer, not the Ethereum layer 1 its self. Kuro is a permissioned layer 2, not

Kadena.

Then Kadena has sharding, yes, but it has close to zero composability between shards. Kadena is more a series of blockchains running smart contracts independently of each other. Each smart contract is deployed to a singular chain, so this is going to start creating favored chains/shards, where everyone deploys their DeFi apps to. You can of course, deploy your contract across all shards, but now you have 20 deployments (please correct me if there's a more graceful way of doing this now).

Shards do not connect to all other shards, rather just 3 peers. This means as the network grows and more shards are added, we'll start seeing longer and more complicated paths between certain shards that increase latency rather significantly (more hops).

My opinion on Kadena is that as it grows it will begin to deteriorate. Obviously they'll try to fix these issues, perhaps even in manners that make a lot of sense and improve the network, but in their current state, and with how hard headed Will Martino is even when he's wrong, I chose to avoid entirely.

?OMEGA? - May 15, 2022, 11:08 am

(May 15, 2022 09:18 AM)BV1 Wrote: [\[CITE\]](#) I've never been a fan of Kadena. I'm constantly seeing their claims of throughput, speed, etc being debunked as clever marketing/outright lies. For example, can Kadena actually reach 480k transactions without the utilization of Kuro? If not, that's similar to saying ETH's TPS is equivalent to whatever its layer 2's can offer, not the Ethereum layer 1 its self. Kuro is a permissioned layer 2, not Kadena.

Then Kadena has sharding, yes, but it has close to zero composability between shards. Kadena is more a series of blockchains running smart contracts independently of each other. Each smart contract is deployed to a singular chain, so this is going to start creating favored chains/shards, where everyone deploys their DeFi apps to. You can of course, deploy your contract across all shards, but now you have 20 deployments (please correct me if there's a more graceful way of doing this now).

Shards do not connect to all other shards, rather just 3 peers. This means as the network grows and more shards are added, we'll start seeing longer and more complicated paths between certain shards that increase latency rather significantly (more hops).

My opinion on Kadena is that as it grows it will begin to deteriorate. Obviously they'll try to fix these issues, perhaps even in manners that make a lot of sense and improve the network, but in their current state, and with how hard headed Will Martino is even when he's wrong, I chose to avoid entirely.

I've asked in their discord. For more technical replies to what you and focus has stated. Lets see if i get some proper replies i can use.

Here is actually a good read on it.

<https://medium.com/kadena-io/how-to-scale-a-proof-of-work-blockchain-9233e5b4b62>

(May 14, 2022 09:50 PM)Focus Broken Wrote: [\[CITE\]](#) The block time on Ethereum is 13.5 seconds, not 20 seconds, and the block time on Litecoin is 2 and a half minutes, not 60 seconds. Their TPS calculation is wrong for LTC vs BTC as well, since Litecoin has 1/2 the block size limit of Bitcoin with 1/4 of the block time, giving it double the total max block space of BTC.

I don't know much about DAGs, can you explain more about what is innovative about them and what tradeoffs come with them? I'm not going to simply dismiss the claim of a theoretically unlimited scaling since Bitcoin's lightning network is theoretically unlimited.

But I do know that having multiple chains isn't really any different from having bigger blocks. Your node still has to validate every chain to make sure they aren't cheating, it's doesn't allow you to skip the basic bandwidth requirements of validating every on chain transaction yourself.

Faster block time is marginally lower security because it increases orphan rates.

Can you explain more about "miners forming DAO are incentivised to cooperate in reconfiguring the network to a larger size"? Hard forks are when previously invalid blocks are now considered valid, and requires all miners and nodes to switch simultaneously in order to prevent a chain split. If miners can hard fork the network, that creates dangerous positive incentive feedback loops and puts non mining users at their mercy.

??

Check this out mate.

<https://medium.com/kadena-io/how-to-scale-a-proof-of-work-blockchain-9233e5b4b62>
<https://youtu.be/hYvXxFbsN6I>

Stanley - May 18, 2022, 1:56 pm

I'm Stanley HF's helper bot. The OP (original poster) of this thread wants everyone to see this page and has elected to bump it to the top of the showthread listing. Since HF doesn't want a ton of LQP (Low Quality Posts) this is the best method of bumping your content. There is a small ?yte fee for each bump. Any OP can bump any of their threads on HF from the linked icon on the top of their first post.

If you haven't already read the first post of this thread we encourage you to do so.

Thanks,
Stanley

Pisna16 - May 19, 2022, 12:15 am

(May 15, 2022 04:14 AM)Pisna16 Wrote: [\[CITE\]](#) It's my top pick followed by Flux, hope the price will go down again

I know you like digging into promising projects, so have a look to Hathor when you have time and let m know

SUI-3183372 - May 19, 2022, 7:46 am

(May 19, 2022 12:15 AM)Pisna16 Wrote: [\[CITE\]](#) I know you like digging into promising projects, so have a look to Hathor when you have time and let m know

I've had my eye on Hathor for a bit now. At face value I like it, but I want to learn more about the team and their direction. They've been around for a long time and the value of their coin is very low still, so I want to learn why that is.

Omniscient - May 19, 2022, 10:09 am

Kadena is a L1 project I have my eye on without any investment. It's been mentioned and it seems to be a solid L1 solution. But as [SUI-3183372](#) pointed out, it does have some hurdles. I also wonder about how that sharding system is going to scale.

Again, there is a TPS race going on. Who is going to hit the L1 solution with 1m+ TPS? If you figure it out or guess correctly you could be in for a windfall on your investment. Is it KDA? Maybe it is.

Tough market right now. Looks like we could experience a lot of slippage leading up to the next halvening or longer if the world economy begins to collapse. There are bets and then there is Bitcoin. Pretty sure that no matter what KDA does, that Bitcoin will fair well. Why gamble when you can invest in your future?

So I'm holding off personally on new investments beyond BTC, LTC, and maybe some XMR. Doesn't seem worth it to me.

Pisna16 - May 19, 2022, 10:26 am

(May 19, 2022 10:09 AM)Omniscient Wrote: [\[CITE\]](#) There are bets and then there is Bitcoin. Pretty sure that no matter what KDA does, that Bitcoin will fair well. Why gamble when you can invest in your future?

So I'm holding off personally on new investments beyond BTC, LTC, and maybe some XMR. Doesn't seem worth it to me.

I personally wouldn't invest in BTC unless it goes under 15k.

And yes I can consider my crypto investment a bet

?OMEGA? - May 19, 2022, 10:28 am

(May 19, 2022 10:09 AM)Omniscient Wrote: [\[CITE\]](#) Kadena is a L1 project I have my eye on without any investment. It's been mentioned and it seems to be a solid L1 solution. But as [SUI-3183372](#) pointed out, it does have some hurdles. I also wonder about how that sharding system is going to scale.

Again, there is a TPS race going on. Who is going to hit the L1 solution with 1m+ TPS? If you figure it out or guess correctly you could be in for a windfall on your investment. Is it KDA? Maybe it is.

Tough market right now. Looks like we could experience a lot of slippage leading up to the next halvening or longer if the world economy begins to collapse. There are bets and then there is Bitcoin. Pretty sure that no matter what KDA does, that Bitcoin will fair well. Why gamble when you can invest in your future?

So I'm holding off personally on new investments beyond BTC, LTC, and maybe some XMR. Doesn't seem worth it to me.

I agree on BTC & LTC.

But i'd like to view it as project that atleast get used and built on and having a pretty big ecosystem will always reach the prices we have right now especially in the next bull run in a few years.

The bigger the eco system there more the network is used and fee's are burned. Which in the end will give a price increase.

& My new #1 rule. I'm out of PoS projects its not reliable. Its nothing but a marketing scheme. (My

Opinion)

BTC, LTC, Flux & Kadena is the everything i want to hodl. I'm selling out of most things when they increase abit in price again.

(May 19, 2022 12:15 AM)Pisna16 Wrote: [\[CITE\]](#) I know you like digging into promising projects, so have a look to Hathor when you have time and let m know
I have been looking at hathor before.

But now i've set a new goal for this year.

DCA'ing BTC & Flux.

Now filling up bags with Kadena & LTC.

Omniscient - May 19, 2022, 10:33 am

(May 19, 2022 10:26 AM)Pisna16 Wrote: [\[CITE\]](#) I personally wouldn't invest in BTC unless it goes under 15k.

And yes I can consider my crypto investment a bet
Then you're a gambler not an investor. I expect return on my investments. You expect to win a fortune on your bets. You are making bad financial decisions.

Pisna16 - May 19, 2022, 10:46 am

(May 19, 2022 10:33 AM)Omniscient Wrote: [\[CITE\]](#) Then you're a gambler not an investor. I expect return on my investments. You expect to win a fortune on your bets. You are making bad financial decisions.

not only crypto makes you an investor so don't speak like you know everything, I like this forum because I learn a lot by reading but I won't invest in BTC because you say we all have to. Good for you if it gives you return.

Omniscient - May 19, 2022, 10:50 am

(May 19, 2022 10:46 AM)Pisna16 Wrote: [\[CITE\]](#) not only crypto makes you an investor so don't speak like you know everything, I like this forum because I learn a lot by reading but I won't invest in BTC because you say we all have to. Good for you if it gives you return.

I don't say we all have to invest in Bitcoin. I just say that smart investors will have 90% of their portfolio as Bitcoin. You can make your own choices.

Since English is obviously not your first language maybe translation is a problem for you. You seem like a rude cunt. Hope you can understand that one.

Pisna16 - May 19, 2022, 10:53 am

(May 19, 2022 10:50 AM)Omniscient Wrote: [\[CITE\]](#) I don't say we all have to invest in Bitcoin. I just say that smart investors will have 90% of their portfolio as Bitcoin. You can make your own choices.

Since English is obviously not your first language maybe translation is a problem for you. You seem like a rude cunt. Hope you can understand that one.

I don't play your game, just keep offending people

?OMEGA? - May 19, 2022, 10:56 am

Ey boys can we keep it at kadena haha.

I'd like more people to discuss the project because it seems extremely exciting <3

Pisna16 - May 19, 2022, 11:00 am

(May 19, 2022 10:56 AM)?OMEGA? Wrote: [\[CITE\]](#) Ey boys can we keep it at kadena haha.

I'd like more people to discuss the project because it seems extremely exciting <3

Have a look to Ryan matta YouTube channel. He speaks only about Kadena, you will get useful infos

SUI-3183372 - October 21, 2025, 2:18 pm

(May 15, 2022 09:18 AM)SUI-3183372 Wrote: [\[CITE\]](#) I've never been a fan of Kadena. I'm constantly seeing their claims of throughput, speed, etc being debunked as clever marketing/outright lies. For example, can Kadena actually reach 480k transactions without the utilization of Kuro? If not, that's similar to saying ETH's TPS is equivalent to whatever its layer 2's can offer, not the Ethereum layer 1 its self. Kuro is a permissioned layer 2, not Kadena.

Then Kadena has sharding, yes, but it has close to zero composability between shards. Kadena is more a series of blockchains running smart contracts independently of eachother. Each smart contract is deployed to a singular chain, so this is going to start creating favored chains/shards, where everyone deploys their DeFi apps to. You can of course, deploy your contract across all shards, but now you have 20 deployments (please correct me if there's a more graceful way of doing this now).

Shards do not connect to all other shards, rather just 3 peers. This means as the network grows and more shards are added, we'll start seeing longer and more complicated paths between certain shards that increase latency rather significantly (more hops).

My opinion on Kadena is that as it grows it will begin to deteriorate. Obviously they'll try to fix these issues, perhaps even in manners that make a lot of sense and improve the network, but in their current state, and with how hard headed Will Martino is even when he's wrong, I chose to avoid entirely.

Kadena is dead

Quote:KADENA PUBLIC ANNOUNCEMENT

We regret to announce that the Kadena organization is no longer able to continue business operations and will be ceasing all business activity and active maintenance of the Kadena blockchain immediately.

We are tremendously grateful to everybody who has participated in this journey with us. We regret that because of market conditions we are unable to continue to promote and support the adoption of this unique decentralized offering.

We have notified our staff that we will be ceasing operations. We are retaining a small team for handling this period of transition and wind-down. For any questions and concerns please contact operations@kadena.io.

The Kadena blockchain is not owned or operated by the company. As a thoroughly decentralized proof-of-work smart-contract blockchain, the network is operated by independent miners, while on-chain smart contracts and protocols are governed independently by their maintainers.

For operational continuity, we will shortly provide a new binary that ensures uninterrupted operation without our involvement, and will be encouraging all node operators to upgrade as soon as possible.

As for the KDA token and protocol, it will also continue in our absence. As noted in our latest token economic update (

<https://medium.com/kadena-io/clarification-to-the-2021-token-economics-update-c3502aa50fa1>), over 566 million KDA remain to be distributed as mining rewards, continuing until 2139, while the platform emission has 83.7 million KDA coming out of lockup until November 2029. We are ready to engage with the Kadena community to discuss how we can aid the transition to community governance and maintenance. We will post updates on this as they become available.

We are tremendously grateful to all team members, community members and partners who went on this journey with us. We wish everyone good fortune in their future endeavors.

https://x.com/kadena_io/status/1980720876371779761