



Layer 1 Blockchains (L1s)

5 Cryptocurrencies To Watch



Key Takeaways

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- 3 Ethereum (ETH), Solana (SOL), Avalanche (AVAX), Aptos (APT) and NEAR Protocol (NEAR) are among the leading L1s.

Layer 1 Blockchains (L1s)

Most, if not all, L1 blockchains have their own native cryptocurrencies. For example, ETH and SOL are the native cryptocurrencies of Ethereum and Solana, respectively. These cryptocurrencies play a key role in aligning the incentives of all stakeholders (e.g. validators, users, developers, investors) to help ensure the blockchain works as intended.

The vast majority of L1s are optimised to process decentralised applications (dapps) and smart contracts, with Bitcoin being a notable exception. Most L1 blockchains are general-purpose and can support a wide range of applications. For instance, Ethereum (ETH), Solana (SOL), and Avalanche (AVAX) are layer 1 blockchains that provide platforms for various applications such as DeFi, gaming, and AI.

However, some L1s are optimized for specific use cases. Examples include Ronin (RON) and Beam (BEAM), which are gaming-focused, and Bittensor (TAO), which is an AI-focused layer 1 blockchain.

Layer 1 Blockchains (L1s)

General Purpose L1s



Specialised L1s



Five L1 Blockchains To Watch

Below, we cover five L1 blockchains that are currently at the forefront of adoption and attention.

1. Ethereum (ETH) - Biggest Layer 1



Ethereum (ETH) is the leading L1 blockchain by various metrics (e.g. number of developers, total value locked, user fees paid, stablecoin supply). In some ways, it has been the victim of its own success, given the sheer demand to use Ethereum.

For all of its strengths, Ethereum has long endured a number of scalability issues, which have resulted in extremely high user fees during times of heavy network activity.

Progress has been made in recent years to help Ethereum scale, most of which is thanks to Ethereum L2s (e.g. Optimism, Arbitrum). Additional upgrades are expected over the coming years, with the next major one slated for early 2025.



Ethereum dominates the L1 market in terms of TVL with \$58.4B (Source: [Artemis](#))

2. Solana (SOL) - Faster, Cheaper Alternative To Ethereum



Solana (SOL) is an L1 blockchain optimised for fast and cheap transactions while maintaining a sufficient level of decentralisation. It is the leading example of a monolithic blockchain (i.e. a blockchain that performs all the core functions of blockchain without outsourcing).

Despite making great strides in 2023 and 2024, Solana is still susceptible to degraded network performance, making it less reliable than the likes of Ethereum. This is why Solana's next major upgrade is so critical. Known as 'Firedancer', this upgrade will introduce a new client that promises to vastly improve Solana's infrastructure. (A client is basically a piece of software that runs Solana.)

Before then, an early implementation (i.e. 'Frankendancer') is expected to be released in the second half of 2024.

Did You Know?

Basically every L1 has at least one major annual conference. When researching, these are often great underrated ways to get a deep understanding of what each blockchain is prioritising and what the short-term goals are.

You can follow these events online. Usually, all speaker presentations are recorded and made available for free. Examples: EthCC, Solana Breakpoint, Avalanche Summit, The Aptos Experience and NEARCON.

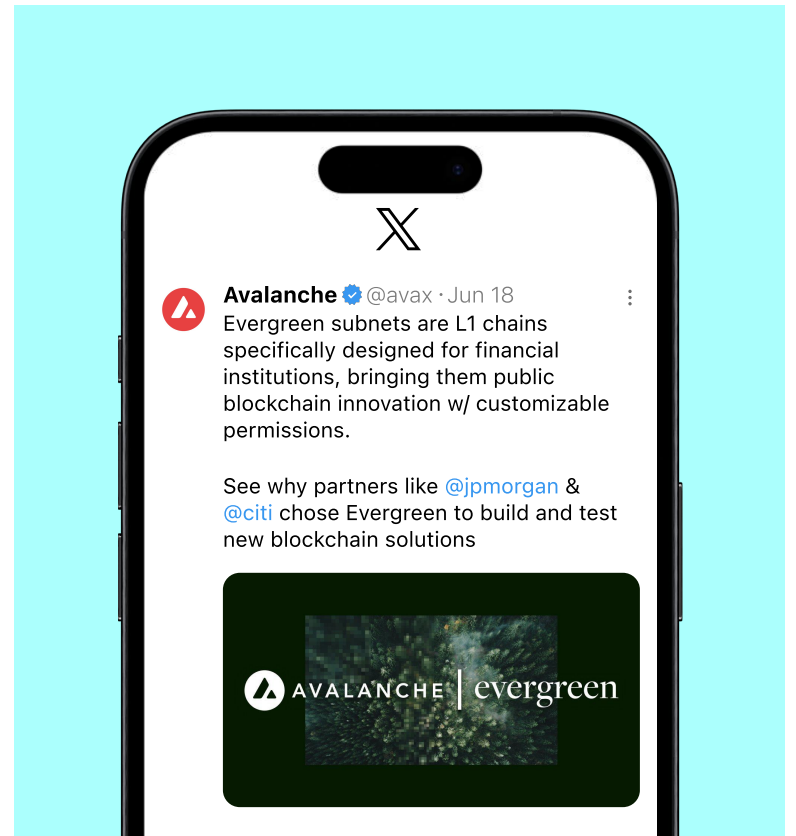
3. Avalanche (AVAX) - Customisable Layer 1



Avalanche (AVAX) is a network of blockchains composed of three primary chains (i.e. C-Chain, X-Chain and P-Chain) and independent blockchains known as ‘subnets’. This subnet architecture is widely considered Avalanche’s main point of difference.

Of note, Avalanche has relatively strong adoption among financial institutions. One driver of this has been Evergreen Subnets, a product launched in 2023 that essentially makes it simple for financial institutions to launch and manage subnets. Early adopters of Evergreen include JPMorgan and Citi.

Like most blockchains, Avalanche will keep undergoing major performance upgrades over the coming years. Avalanche’s next major upgrade will seemingly be Avalanche 2.0. While not yet officially announced, Ava Labs co-founder and CEO Emin Gün Sirer talked about this upgrade in a presentation in late 2023.



4. Aptos (APT) - RWA-Focused Layer 1



Aptos (APT) is an L1 blockchain that launched in 2022. Like the other L1s listed here, Aptos is aiming to make it as simple as possible to use dapps and interact with blockchains, both directly and indirectly.

Distinguishing it from the other L1s listed in this article, Aptos uses a modern smart-contract programming language called Move, which is designed to be vastly superior to existing languages (e.g. Ethereum’s Solidity) in terms of security and productivity.

While Aptos is a general-purpose L1, it is often associated with real-world assets (RWAs). This association is largely due to a high-profile partnership Aptos secured with Ondo, a platform that offers RWAs associated with financial assets. Further, a solution called Aptos Ascend exists that is targeted at traditional finance.

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There is widespread speculation that Aptos may soon partner with BlackRock, which has announced plans to launch its own stock exchange to rival the New York Stock Exchange. BlackRock aims to focus heavily on tokenising real-world assets, viewing it as the future of financial markets. Many believe tokenisation will be central to this new exchange, requiring a blockchain with instant finality, which Aptos could provide.

Aptos's CEO, Mo Shaikh, a former Meta employee, recently tweeted that Aptos powering the NYSE with a fast and efficient trading platform is a matter of when, not if...

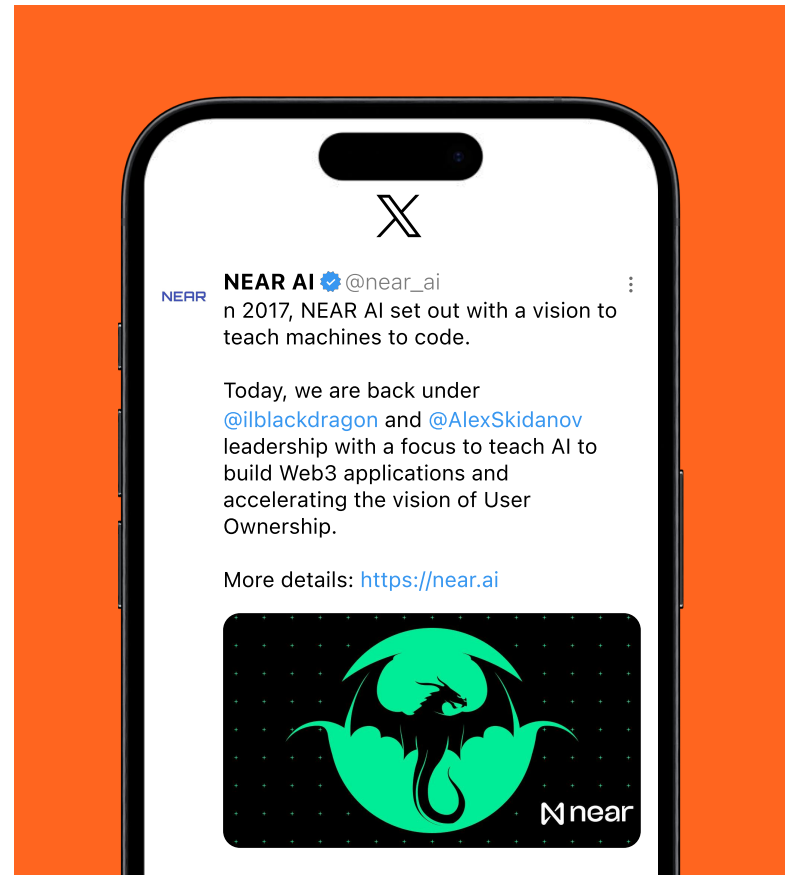


5. Near Protocol (NEAR) - AI-Focused Layer 1



NEAR Protocol (NEAR) is another L1 blockchain designed for high performance. Uniquely, it leverages a scaling technique known as sharding. To date, NEAR Protocol has been relatively strong in the consumer and DeFi categories. However, it is increasingly leaning into AI, an area the founding team has deep knowledge of.

In mid-2024, the team announced NEAR.AI, an open-source R&D effort led by NEAR Protocol co-founders Alex Skidanov and Illia Polosukhin. The goal of this initiative is to drive a movement of user-owned AI to avoid a situation where AI is controlled by a handful of powerful tech companies and governments.



Interesting Fact

NEAR.ai was the initial name of Near Protocol when it was founded in 2017. Back then, it was an AI startup that had nothing to do with blockchain, that was until it pivoted in 2018.)