

WHITEPAPER / VERSION 1.0

The operating system for *tokenized equities*.

The most important assets in the world are becoming programmable. Stratum is the protocol that makes them productive: indexed, lent, leveraged, reshaped, and traded around the clock, by anyone, without intermediaries.

Stratum Protocol

June 2026 / Built on BNB Chain

stratum.finance

CONTENTS

What this paper covers

01 The world before Stratum

A century of closed markets, the first attempts to put stocks on-chain, and why they broke.

02 Why now

The largest asset class on earth is coming on-chain, and it arrives economically inert.

03 The architecture

Seven layers, from the oracle that never sleeps to the engine that returns value to holders.

04 Composability and network effects

Why every new asset and every new product makes the protocol stronger.

05 Who it is for

From the first-time holder to the institutional treasury.

06 Why BNB Chain

We build where the assets, the liquidity, and the distribution already are.

07 Token and economics

A vote-escrow flywheel powered by real fees, not emissions for their own sake.

08 The scale we are building toward

From tokenized stocks to a 24/7 operating system for all real-world assets.

09 The path

Built in order, from the ground up.

ABSTRACT

Tokenized equities are the most consequential asset to arrive on-chain in a decade, and almost nobody is using them for anything yet. They trade around the clock but stop being priced when the underlying

exchange closes. They are technically composable but economically inert. Stratum exists to change that.

Stratum is a single, permissionless protocol that turns any tokenized stock into a productive asset, a building block that can be indexed, lent against, leveraged, reshaped into structured risk, and traded at any hour. It is organized as seven layers, each useful alone and each compounding the next, anchored by a fair-value oracle that prices assets even while the market is dark. This paper sets out the world we are replacing, the moment that makes it possible, the system itself, and the scale it opens up.

Ownership was built for a *building*, not a network.

For a hundred years, owning a share of a company meant holding a position that did nothing between the opening bell and the close, and nothing at all on weekends and holidays. The machinery around it, exchanges, brokers, clearing houses, custodians, was engineered for a physical, local, business-hours world. It worked. It also left enormous value on the table.

A share was a claim you could only act on through a chain of intermediaries, during a narrow window, from inside a permitted jurisdiction. Settlement took days, then a day. Access was gated by geography and paperwork, so most of the world could not touch the companies defining the future even as they read about them every morning. And the moment the exchange closed, the asset became frozen in amber: still yours, still valuable, but inert until a building in New York opened again.

The internet did not fix this. It put a faster interface on the same machine. The settlement rails, the custody, the gatekeeping, and the hours all remained. To change the asset itself, you needed a different substrate.

The first attempts, and why they broke

Crypto provided that substrate, and the first wave tried to put equities on it. Synthetic-asset protocols minted tokens that tracked the price of stocks without holding any, collateralized by volatile governance tokens; when regulatory and economic pressure mounted, the equity exposures were wound down. Mirror-style protocols on other chains issued synthetic stocks backed by an algorithmic stablecoin, and they evaporated when that stablecoin collapsed. A major centralized exchange offered tokenized stocks through an opaque custodial arrangement, and they disappeared with the exchange.

Each attempt taught the same lesson. Price exposure without real, redeemable backing is a derivative dressed as ownership, and it inherits the fragility of whatever stands behind it. Custody concentrated in a single opaque entity is a single point of failure. To put equities on-chain in a way that lasts, you need two things at once: assets that are genuinely backed and redeemable, and rails that are credibly neutral and composable.

The unlock

In 2026 both arrived together. Properly-backed tokenized stocks reached the market as standard, transferable tokens, each representing a real share held with a regulated

custodian, redeemable, and verified by regular on-chain proof of collateral. Stablecoins had already proven, at a scale measured in the hundreds of billions of dollars, that tokenized real-world value can circulate globally with deep liquidity. The asset class finally existed on solid ground.

But existing is not the same as being useful. A backed tokenized share, sitting in a wallet, still does nothing. The infrastructure to make it productive, to index it, lend against it, leverage it, hedge it, and reshape its risk, did not arrive with it. That gap is precisely the opportunity, and it is what Stratum is built to fill.

02 / WHY NOW

The largest asset class on earth, arriving *inert*.

Global public equities are worth on the order of one hundred trillion dollars, with U.S. markets alone in the tens of trillions. It is the deepest, most liquid, most universally understood asset class humans have ever built. Even a single-digit percentage of it moving on-chain would dwarf the entire current value of decentralized finance.

That migration is no longer speculative. The world's largest asset managers have launched tokenized funds. Tokenized treasuries have grown from a curiosity into a multi-billion-dollar market in under two years. Industry research firms now project the broader tokenized-asset market reaching into the trillions of dollars by the end of the decade. Tokenization has crossed from thesis to roadmap, and equities are the prize at the center of it.

~\$100T

Approximate global public-equity market capitalization

24/7

Hours a tokenized share can trade, versus a fraction of that for the underlying

7

Composable layers Stratum builds on top of every tokenized asset

The structural gap is the wedge

Two facts are true of nearly every tokenized equity today, and each is an opening. The first is a pricing gap. The token trades continuously, but the exchange underneath it is open only a few hours each weekday, so for the majority of every week the asset has no live reference price. Whoever can answer what a tokenized share is truly worth at three in the morning controls the foundation that every serious financial product on top must stand on.

The second is an economic gap. These tokens are composable in theory and inert in practice. They can be transferred, and almost nothing else. They earn no yield, secure no credit, and belong to no strategy. The entire apparatus that makes ordinary crypto assets productive, lending, leverage, indices, derivatives, structured products, has simply not been built for them yet.

Timing

Infrastructure layers are won early and held for a long time. The protocol that builds the productivity layer for tokenized equities while the asset class is young becomes the default venue its liquidity routes through, the price feed other builders depend on, and the demand engine the issuers themselves want to amplify. The window to be that layer is open now, and it does not stay open forever.

*A backed tokenized share is the most valuable financial primitive ever to sit idle. **We intend to be the reason it never sits idle again.***

03 / THE ARCHITECTURE

Not an app. An *operating system*.

Stratum is a vertical stack of seven layers. Each is useful on its own, and each makes the layer above it possible. Layers communicate only through published interfaces, so every one can be audited, replaced, and extended independently. Together they give a passive tokenized share the full range of motion the rest of decentralized finance already enjoys.

00	Fair-value oracle	A reliable price for every tokenized stock, around the clock, including the hours the exchange is dark. The deepest moat and the foundation everything inherits.
01	Portfolios	Rules-based indexes and manager-run vaults, each minting a single, fully backed, composable token.
02	Leverage and yield	Idle holdings earn lending yield; one action adds leverage; portfolio tokens become collateral across the chain.

03	Structured products	Principal separated from yield; protected senior claims split from leveraged junior ones.
04	Derivatives	Perpetual futures on whole indexes, priced through the night by the oracle beneath them.
05	Agent vaults	Strategies executed by software inside hard, on-chain limits, with track records reported on-chain.
06	The flywheel	Fees from every layer return to the people who lock the token and steer where the protocol grows.

Layer 0: The fair-value oracle

The defining technical problem of tokenized equities is price discovery while the market is closed. Stratum treats it as the core primitive to solve because every product above inherits the answer. During exchange hours the oracle follows a primary market feed, guarded against staleness and against disagreement between sources. When the market closes, it switches to a bounded fair-value model that begins from the last official close and incorporates a constrained, keeper-signed estimate of overnight movement, always flagged as an after-hours value rather than a live quote.

Alongside price, the oracle records proof-of-collateral attestations for each asset, the backing ratio, the time of attestation, and a source reference, and a depeg monitor continuously compares the token's market price to its fair value. A circuit breaker pauses minting, redemption, and liquidation whenever the two diverge beyond tolerance or a feed goes stale. Exposed as a public feed, this becomes infrastructure other builders depend on, which is how an oracle stops being a component and becomes a moat.

Layer 1: Portfolios

A portfolio is a single token representing a fully backed basket of tokenized equities. The same engine produces two product types. An index follows transparent, rules-based weights and rebalances toward them within tolerance. A vault is directed by a manager within hard guardrails and charges management and performance fees against a high-water mark. Minting and redemption are priced at the oracle's net asset value, so external arbitrage keeps each token aligned with the value of its components. A permissionless factory deploys new portfolios as lightweight proxies and enforces an asset allow-list drawn from Layer 0, so only assets with healthy collateral and safe trading status can be included.

Layers 2 and 3: Productive capital and shaped risk

Assets inside a portfolio need not be idle. A yield router allocates spare holdings into money markets, keeping a buffer for redemptions, so every portfolio earns a base return on top of price exposure. A leverage module lets a holder deposit a portfolio token, borrow a stablecoin, and acquire more of the underlying, repeating to a capped target with continuous health checks against the oracle. On top, structured products reshape that exposure: a maturity-dated wrapper separates a principal token, redeemable one-to-one at maturity, from a yield token that accrues the return until then, and a tranche vault issues a protected senior claim and a first-loss junior claim with a defined coverage ratio. The same underlying basket can be tuned to almost any risk appetite.

Layers 4 and 5: Derivatives and autonomy

With a dependable around-the-clock price, perpetual futures on whole indexes become possible. Positions are margined and liquidated against the oracle's fair value, with funding that responds to utilization and an insurance fund backstopping the system; risk controls widen margins or halt new positions whenever the oracle flags a stale price or a depeg. At the top of the stack, agent vaults replace the human manager with an authorized software executor bound to an on-chain policy that fixes the limits it can never cross, an allow-list of assets, a maximum position size, a turnover cap per epoch, a drawdown kill-switch, and a timelock on changes. The agent proposes; the policy disposes; and public, tamper-evident performance accounting lets capital rank strategies on results rather than narrative.

04 / COMPOSABILITY AND NETWORK EFFECTS

Every new asset makes the protocol *stronger*.

Stratum is designed so that growth compounds. Because every portfolio is a standard token and the oracle is a public feed, each piece becomes raw material for the next, and the protocol's surface area expands automatically with the asset class it serves.

Consider what happens when a new tokenized stock is listed. It immediately becomes a candidate component for every index, a new market for every vault, fresh collateral for the leverage layer, a new underlying for tranches, and a new perpetual for traders. One listing multiplies across six layers without a single line of new code. The protocol does not merely support more assets; it gets more valuable with each one.

The same is true of products. A portfolio token can be supplied as collateral, wrapped into a structured product, traded as a perpetual, and managed by an agent, all at once.

These are money legos in the truest sense, and the connective tissue is the oracle, which every layer and every external builder consults for the one thing they all need: a trustworthy price.

The surface where this becomes viral is deceptively simple: anyone can tokenize a thesis in a single transaction.

An "AI and semiconductors" index, a "memory supercycle" basket, a market-neutral vault, a protected senior tranche on a blue-chip name, each can be created permissionlessly, and the instant it exists it is tradeable, leverageable, and tranche-able by everyone else. This is user-generated finance, fully backed and fully on-chain, and it turns every participant into a potential product creator. The protocol that hosts that creativity becomes the place liquidity gathers, and liquidity, once gathered, is the hardest thing in markets to move.

05 / WHO IT IS FOR

From the first holder to the *institution*.

Stratum is not built for a niche. It is built for everyone who touches a tokenized equity, and it gives each of them something they cannot get by holding a token alone.

The holder ALREADY OWNS THE STOCK

Supply a single tokenized share to earn yield while keeping full price exposure, borrow stablecoins against it without selling and without a taxable event, or fold it into an index to cut single-name risk. The asset finally pays its way instead of sitting still.

The builder COMPOSES ON TOP

Every portfolio is a standard token and the oracle is a public feed. Build lending markets, structured products, or entirely new applications without rebuilding price discovery or asking anyone for permission.

The allocator SHAPES RISK

Express a view in one click with an index, dial risk up or down with senior and junior tranches, separate income from principal, and earn a base yield across the whole position.

The trader NEVER WAITS FOR THE BELL

Go long or short a whole sector with a perpetual that trades at 3am, hedge overnight gap risk while the traditional market sleeps, and act on news the moment it breaks rather than hours later.

The manager RUNS STRATEGIES

Launch a vault or an autonomous agent, build a public and tamper-evident track record, and earn performance fees as capital follows the leaderboard toward proven results.

The treasury PUTS RESERVES TO WORK

For on-chain organizations and funds, hold equity exposure that earns yield, can be borrowed against for operating liquidity, and settles instantly, without leaving self-custody.

06 / WHY BNB CHAIN

We build where the *assets* already live.

Stratum is built on BNB Chain because that is where tokenized equities found their first real home and their deepest liquidity. The asset class and the venue grew up together, and we intend to be the layer that makes them productive.

The reference assets are Binance bStocks: standard tokens backed one-to-one by U.S. shares held with a regulated custodian, issued through a special-purpose vehicle, and verified by regular proof of collateral. At launch they covered a tightly technology-weighted basket, including NVIDIA, Micron, SanDisk, Circle, and Tesla, and the roster keeps expanding. Because they are standard tokens, everything Stratum builds for one of them works for all of them, and for every tokenized equity that follows.

Three reasons the chain is the right base

Liquidity. The tokenized-equity market is concentrated here, and the productivity layer belongs where the assets and their order flow already are. **Cost and speed.** The around-the-clock minting, redeeming, leverage, and trading Stratum depends on only make economic sense when fees are low and settlement is fast, which is precisely the chain's design point. **Composability.** The money markets and exchanges Stratum routes through, the lending venues and the deep automated market makers, already live alongside the assets, so integration is a connection rather than a construction project.

Stratum is not competing with the ecosystem that shipped tokenized stocks. It is the demand engine that makes them worth holding, and that alignment matters. Every product Stratum launches pulls buy-pressure across the entire tokenized-equity lineup at once, deepens on-chain value, and turns inert tokens into composable, productive assets, which is exactly the outcome the chain and its issuers are working toward.

07 / TOKEN AND ECONOMICS

A flywheel, *not* a faucet.

Stratum captures fees at every layer and routes them to the people who govern and grow the protocol. Value comes from real activity, not from emissions for their own sake. The token is the steering wheel and the dividend, never the product itself.



The fee flywheel. Activity funds lockers, who steer incentives that attract more activity.

STRAT is the governance and utility token, issued on a fixed and transparent schedule. Holders lock it to receive **veSTRAT**, a non-transferable balance that decays over the lock and confers two rights: a pro-rata share of protocol revenue, and a weekly vote over where token emissions flow. Creators and managers compete for those emissions to bootstrap their products, which deepens liquidity, which raises fees, which rewards lockers, who then direct the next round of emissions. Each turn of the loop tightens it.

Real yield, from every layer

Because the protocol earns from genuine economic activity rather than from inflation alone, the rewards flowing to lockers are backed by revenue rather than dilution. A fee distributor collects from creation and management, vault performance, leverage spread, tranche origination, and perpetual funding, then pays it to veSTRAT holders without leakage. An optional incentive market lets product creators reward voters who direct emissions toward their gauge, turning governance itself into a transparent, market-priced coordination mechanism.

LAYER	FEE SOURCE	INDICATIVE RATE
Portfolios	Creation and management	0.30 to 2.00%
Vaults	Performance, high-water mark	10 to 20%
Leverage	Borrow and looping spread	variable
Structured	Tranche origination	0.20 to 1.00%
Derivatives	Funding and taker fees	variable

Rates are indicative of the design space and are set by governance. They are not a commitment and may change.

08 / THE SCALE WE ARE BUILDING TOWARD

Tokenized stocks are the *beachhead*.

Stratum begins with tokenized equities because that is where the demand and the liquidity are today. But the architecture was never specific to stocks. Every layer, the oracle, the portfolio engine, leverage, structured products, derivatives, agents, applies to any tokenized real-world asset with a price and a backing.

The same fair-value engine that prices a tokenized share at midnight can price a tokenized treasury, a commodity, a fund, or a credit instrument. The same portfolio factory that bundles stocks into an index can bundle bonds into a duration ladder or commodities into an inflation basket. The same tranching that splits a senior claim from a junior one on an equity index works on any cash-flowing asset. As the universe of tokenized real-world assets expands from billions toward the trillions that industry

forecasts anticipate, Stratum's addressable surface expands with it, automatically, because the protocol was built for the category rather than for a single asset.

*We are not building a product for one asset. We are building **the operating system for programmable capital markets.***

Held to its conclusion, this is a financial system that never closes, that anyone on earth can access from a wallet, where ownership is productive by default and risk can be shaped to fit, and where the infrastructure is open for others to build on rather than walled off for rent. That is a scale few can fathom from where markets stand today, and it is reachable one layer at a time, starting with the assets already on-chain.

Why we are building it

We are building Stratum because the most important assets in the world are becoming programmable, and someone has to build the layer that makes them productive, openly and for everyone rather than narrowly and for a few. We are doing it to innovate, to build, and to get better at the craft of open finance, not to extract. The protocol is permissionless on purpose, composable on purpose, and aligned with its ecosystem on purpose, because the systems that endure are the ones that create more value than they capture.

09 / THE PATH

Built in order, *from the ground up.*

We ship layer by layer, because each one depends on the one beneath it. The oracle and the portfolio engine come first, since everything else inherits them. The token activates when there is real revenue for it to carry, not before.

PHASE 01

Foundation

The fair-value oracle and the portfolio engine. Indexes and vaults go live, fully backed and composable, with the oracle exposed as a public feed for other builders.

PHASE 02

Productive capital

Idle-asset yield, one-click leverage, and single-asset supply for holders who already own a tokenized stock and simply want it to work.

PHASE 03

Shaped risk and round-the-clock trading

Structured products and 24/7 derivatives, unlocked by a price feed that never goes dark.

PHASE 04

Autonomy, alignment, and reach

Agent vaults, the token and its flywheel, and expansion across new tokenized real-world assets and new networks as the category grows.

Each layer is shipped only after the one beneath it is built and proven. Security and audit detail is maintained as living documentation outside this paper, so that it always reflects the current state of the deployed system rather than a snapshot frozen in print.

The market is becoming
code.

We intend to write the part
that *makes it worth owning*.

Stratum Protocol / Built on BNB Chain / 2026

This document is provided for information only. It is not an offer to sell or a solicitation to buy any token or security, and it is not financial, legal, or tax advice. It contains forward-looking statements that describe current intentions and may change. Market-size and industry-projection figures are approximate and drawn from publicly available estimates that may vary by source. Tokenized assets and decentralized finance carry significant risk, including the total loss of capital. Availability may be restricted in some jurisdictions. Conduct your own research before participating.