

METALS

ARBITRUM × PULSECHAIN



Q7 AUTO-PERP ENGINE

Quantitative Trading System Architecture

Developed by High-Frequency Quantitative Traders
New York • London • Singapore

WHITEPAPER v1.0

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EXECUTIVE SUMMARY

The Q7 Auto-Perp Engine represents the culmination of years of quantitative research conducted by elite trading desks across Wall Street. Originally architected by high-frequency traders from major New York financial institutions, the Q7 system has been refined through millions of simulated and live market cycles to achieve exceptional risk-adjusted returns in the perpetual futures market.

This paper introduces the Metals framework—a cross-chain capital efficiency system that bridges Arbitrum's high-performance DeFi ecosystem with PulseChain's growth-oriented tokenomics. At its core, the **5% Win Reallocation Protocol** automatically captures a portion of profitable trades and channels them through ZapperX into PLS tokens, creating a self-sustaining flywheel that compounds capital across both ecosystems.

"The Q7 engine doesn't predict markets—it adapts to them. Through dynamic risk allocation and multi-timeframe confluence analysis, it identifies statistical edges that persist across market regimes."

— Q7 Development Team

SYSTEM ARCHITECTURE

The D-RAM Framework

The Q7 engine operates on the proprietary D-RAM (Dynamic Risk Allocation Model) framework v5.2.6, which orchestrates position sizing, entry timing, and exit management through a unified decision matrix. D-RAM continuously analyzes:

- Multi-timeframe trend confluence (1H, 4H, Daily, Weekly)
- Volatility regime classification (Low/Medium/High/Extreme)
- Liquidity depth and order book imbalance metrics
- Cross-asset correlation breakdown signals
- Funding rate arbitrage opportunities

gTrade Integration

The Q7 system interfaces directly with gTrade on Arbitrum, leveraging its synthetic asset infrastructure for capital-efficient perpetual trading. gTrade's architecture enables up to 150x leverage on major pairs with guaranteed execution—critical for the Q7's time-sensitive entry algorithms.

THE 5% WIN FLYWHEEL

Profit Reallocation Protocol

A foundational innovation of the Metals framework is the automated **5% Win Reallocation Protocol**. This mechanism captures 5% of every profitable trade and redirects it through a cross-chain pipeline to accumulate PulseChain (PLS) tokens in a dedicated growth engine wallet.

STEP	ACTION
1	Profitable trade closes on gTrade (Arbitrum)
2	System calculates 5% of realized profit
3	5% USDC routed to ZapperX bridge contract
4	ZapperX executes atomic swap: USDC → PLS
5	PLS tokens transferred to Growth Engine wallet
6	Flywheel cycle complete; system monitors for next win

Growth Engine Wallet

Destination Address: [0x1449a7d9973e6215534d785e3e306261156eb610](#)

This wallet serves as the accumulation point for PLS tokens. As the flywheel operates, the wallet's holdings grow automatically, creating a compounding effect where successful Arbitrum trading performance directly translates to PulseChain ecosystem growth.

TECHNICAL SPECIFICATIONS

ZapperX Bridge Integration

PARAMETER	SPECIFICATION
Source Chain	Arbitrum One
Destination Chain	PulseChain
Input Token	USDC
Output Token	PLS
Bridge Mechanism	Atomic Swap
Settlement Time	~2-5 minutes
Slippage Tolerance	0.5% max

Risk Parameters

- Maximum position size: 2% of total portfolio per trade
- Maximum concurrent positions: 60
- Dynamic stop-loss: ATR-based trailing stops
- Maximum drawdown trigger: 15% portfolio value
- Correlation limit: No more than 30% exposure to correlated assets

CONCLUSION

The Metals Arbitrum x PulseChain framework represents a paradigm shift in DeFi capital allocation. By combining institutional-grade quantitative trading systems with automated cross-chain value transfer, we create a self-reinforcing ecosystem that grows stronger with every successful trade.

The Q7 Auto-Perp Engine, born from the expertise of New York's quantitative trading elite, provides the alpha generation engine. The 5% Win Flywheel ensures that success in one ecosystem catalyzes growth in another. Together, they form **Metals**—a framework for building lasting wealth across the decentralized frontier.

This is the way.



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