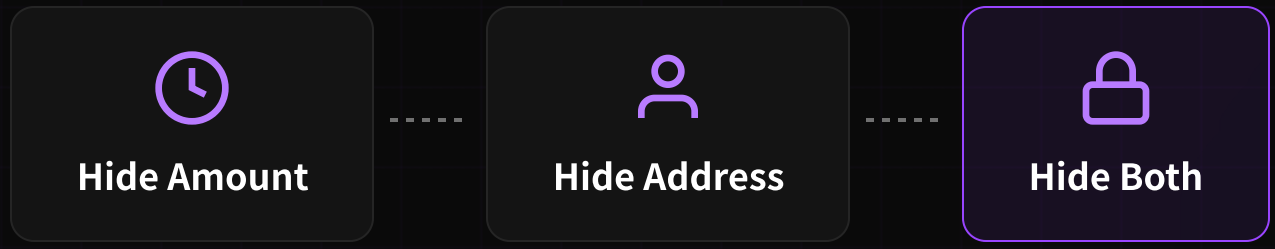
SOLANA | ZK PROOF | FHE

Compliance-Ready Confidential Transfer

Privacy-preserving transactions with regulatory compliance



LatticA | ZK + FHE Infrastructure

THE PROBLEM

On-Chain Transparency Breaks Privacy

Corporate Payroll

Company Wallet → Employee

AMOUNT	ADDRESS	TIMING
$15,000	0x1a2b...9f	Monthly

Salary, bonus structure, employee wallets all PUBLIC

B2B Settlements

Firm A → Firm B

DEAL SIZE	PARTNERS	FREQUENCY
$50M	Visible	Trackable

Deal sizes, partnerships, trading volumes EXPOSED

100%	$2.3B+	0
of on-chain transactions are public	crypto payroll market exposed	compliant privacy solutions

CURRENT LANDSCAPE

Existing Solutions Fall Short

Feature	Solana Confidential	Dark Pools	LatticA
Amount Hidden	✓	✓	✓
Address Hidden	✗	✓	✓
Regulatory Compliance	Partial	✗	✓
Audit Capability	Limited	✗	✓

Tornado Cash Case Study

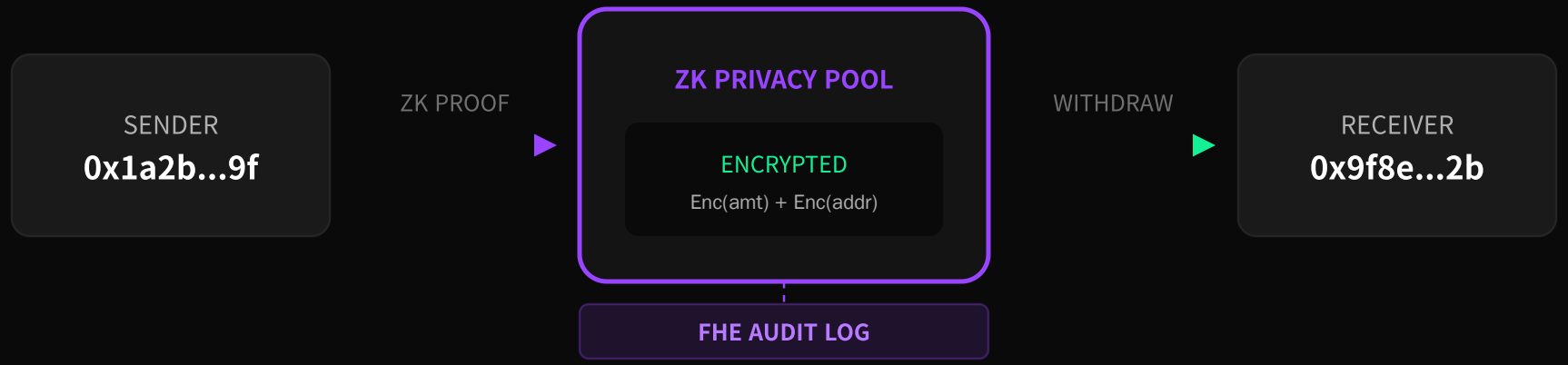
CEO sentenced to prison | $1B+ in regulatory fines | Protocol sanctioned

Privacy without compliance = Legal risk

DOJ Press Release Treasury OFAC Sanctions

OUR SOLUTION

ZK + FHE Architecture



Zero-Knowledge Proof

Validates transaction without revealing sender, receiver, or amount

FHE Encrypted Audit

Homomorphic encryption enables queries on encrypted logs

`SUM(Enc(amount)) where Enc(sender) = X`

MPC Threshold Decryption

3-of-5 nodes required for audit decryption

COMPLIANCE QUERY

"Sum of transfers from X > $10K?"

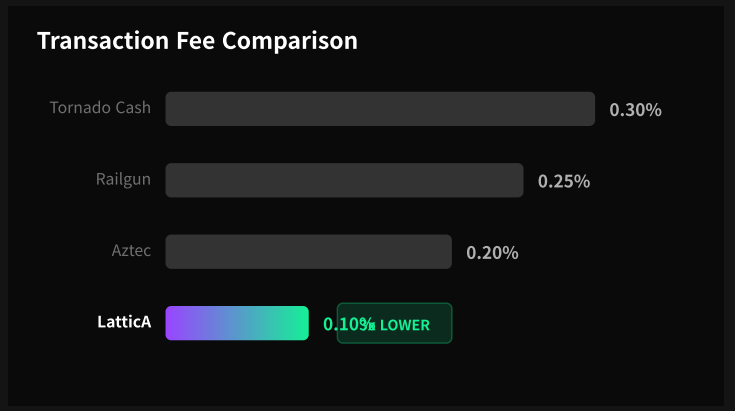
→

FHE RESULT

TRUE (computed on encrypted data)

MARKET OPPORTUNITY

Market Size & Go-To-Market



Go-To-Market Phases

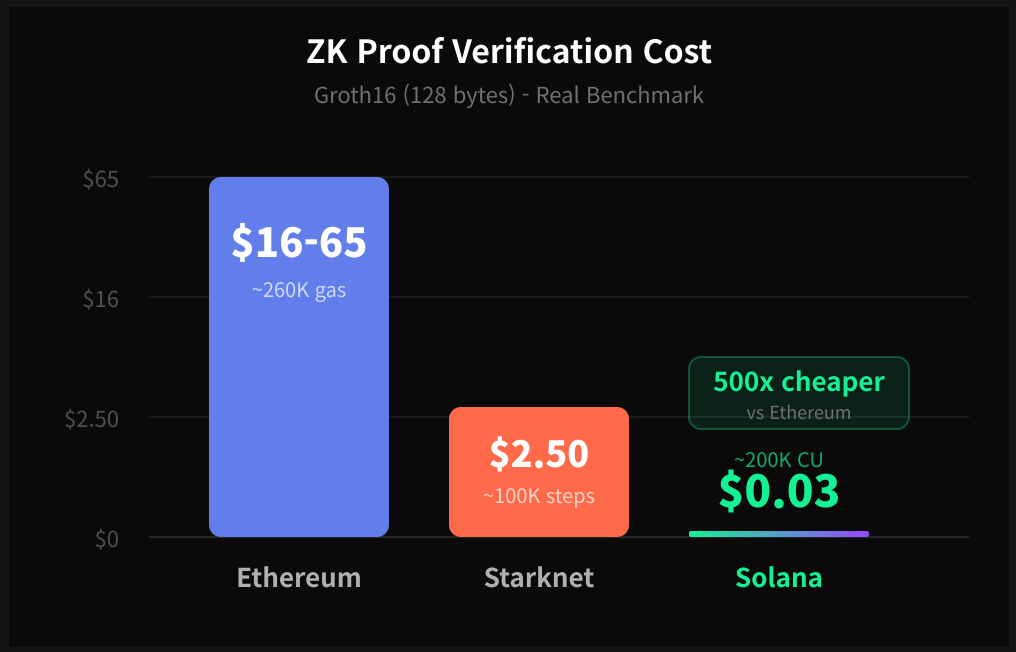
Q1 — **Solana Payroll**
Crypto-native companies

Q2 — **B2B Settlements**
Trading firms, DAOs

Q3 — **DeFi SDK**
DEX, lending protocols

Q4 — **Multi-Chain**
ETH, Polygon expansion

Why Solana



$0.03
ZK Verification
Groth16 proof - 200K CU

400ms
Block Time
Near-instant finality

Token-2022
Native Extension
Built-in confidential transfer

Benchmark: Proving Time (M1 Mac)

4.0s	4.9s	5.1s	3.5GB
amount_audit	pool_identity	pool_transfer	Peak RAM

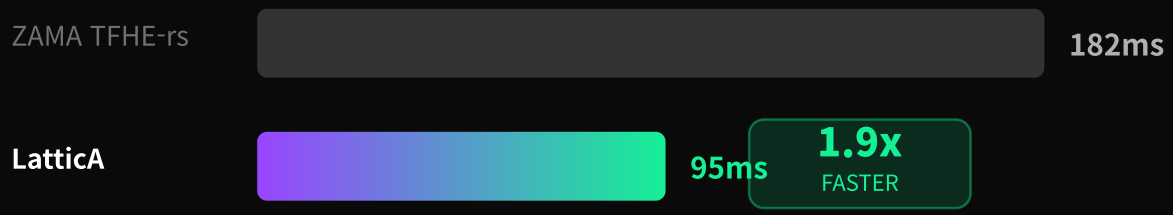
DeFiLlama groth16-solana Token-2022

COMPETITIVE EDGE

Why LatticA

FHE Bootstrapping Performance (64-bit)

Add/Sub operation benchmark



Source: ePrint 2025/2150

01 Cross-Platform Determinism

CPU GPU FPGA

NTT-based (no FFT errors)

02 Compliance-First Design

AML/KYC · Audit Logs · Threshold Dec

03 Production Ready

Devnet Live · Token-2022

Ready to bring compliant privacy to your platform

Contact Us

Groth16 Paper · Solana Explorer