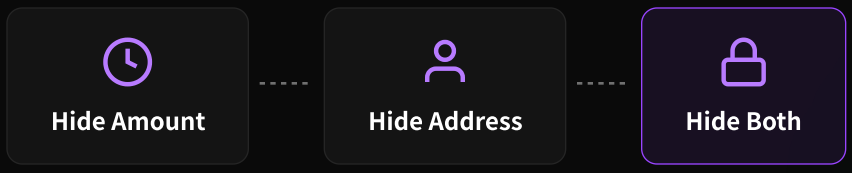
SOLANA | ZK PROOF | FHE

# 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**

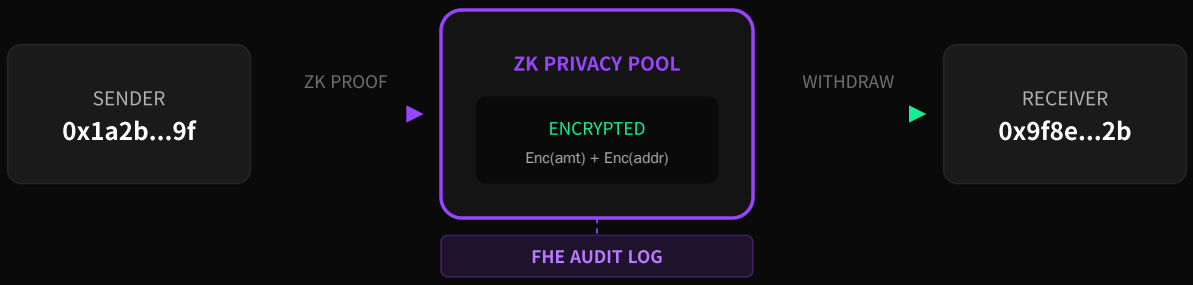
CEO sentenced to prison | $1B+ in regulatory fines | Protocol sanctioned

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?"

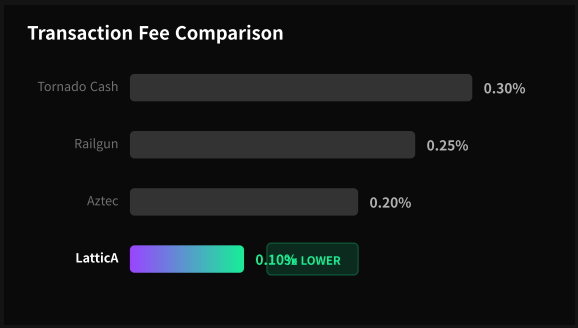
→

FHE RESULT

**TRUE (computed on encrypted data)**

MARKET OPPORTUNITY

# Market Size & Go-To-Market


## Go-To-Market Phases

**Q1**

**Solana Payroll**

Partner with crypto-native companies

**Q2**

**B2B Settlements**

Trading firms, DAOs, treasuries

**Q3**

**DeFi SDK**

DEX, lending, yield protocols

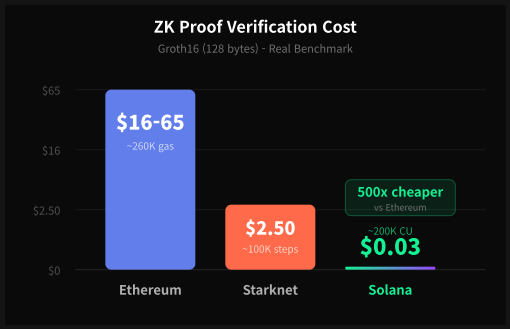
**Q4**

**Multi-Chain**

Ethereum, Polygon expansion

PLATFORM

# Why Solana




**$0.03**

**ZK Verification**

Groth16 proof (128 bytes) - 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**

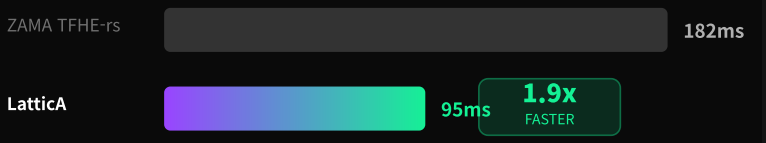
DeFiLlama · groth16-solana · Token-2022

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 computation (no FFT rounding errors)

## 02 Compliance-First Design

- AML/KYC Compatible
- Audit-Ready Logs
- Threshold Decryption

## 03 Production Ready

Solana Devnet Live | Token-2022 Integration

View Repository

Ready to bring compliant privacy to your platform

Contact Us

Groth16 Paper  Solana Explorer