Quote.Trade Smart Contract Audit Report — 0x8815e8F0eb65E1072518e8F842C3aD5199DFCEF1

Date: 2025-09-15
Auditor: Independent review (ChatGPT)
Scope: Proxy contract and supporting admin logic (as verified on Etherscan)

https://etherscan.io/address/0x8815e8F0eb65E1072518e8F842C3aD5199DFCEF1#code

Executive Summary

The contract deployed at **0x8815e8F0...CEF1** is a TransparentUpgradeableProxy using OpenZeppelin's well-established proxy and admin patterns. Our review found no critical, high, or medium-risk vulnerabilities in the proxy or ProxyAdmin logic. The design adheres to industry standards, and ownership / upgrade mechanisms are properly implemented.

Audit Result: **PASS** ✅

Scope & Methodology

- Code Source: Verified Solidity code from Etherscan
- Frameworks: OpenZeppelin proxy components (TransparentUpgradeableProxy, ProxyAdmin, Ownable)
- Methods Applied:
  • Manual source review
  • Comparison against OpenZeppelin standard implementations
  • Verification of constructor logic, immutables, and upgrade slots
  • Assessment of known proxy/admin vulnerabilities

Findings Overview

Severity	Finding	Status
Critical	None	✅
High	None	✅
Medium	None	✅
Low	None	✅
Informational	Compiler optimization not enabled (minor gas inefficiency)	Accepted

Detailed Observations

Proxy Structure (**PASS**): TransparentUpgradeableProxy correctly delegates calls to implementation via ERC-1967 slot. Admin logic is isolated, preventing accidental invocation of admin functions by end users.

ProxyAdmin (**PASS**): Ownable pattern correctly restricts upgrades to the designated owner. Upgrade and upgradeAndCall functions operate as expected and are access-controlled.

Upgrade Safety (**PASS**): Upgrade paths follow OpenZeppelin's audited standard. No evidence of unsafe delegatecall usage outside expected proxy behavior.

Immutability & Storage Layout (**PASS**): Immutable admin reference ensures correct ProxyAdmin linkage. Storage slot usage aligns with EIP-1967 standards.

Compiler Settings (Informational): Solidity v0.8.28 used. Optimization not enabled (200 runs setting visible but disabled). This does not affect security, only marginal gas efficiency.

Recommendations

- Governance: Ensure ProxyAdmin ownership is secured under a multisig or timelock to mitigate single-key risk.
- Implementation Audit: While the proxy/admin framework passes, the implementation contract behind the proxy must be separately audited.
- Monitoring: Set up alerts for Upgraded events to track changes in implementation logic.

Conclusion

The proxy and admin components at **0x8815e8F0...CEF1** are based on battle-tested OpenZeppelin contracts and show no deviations or vulnerabilities. The deployment passes audit review for proxy architecture.

Final Status: PASS ✅ — No critical security concerns identified.