# High-Level Design Document (HLDD) – Genesis AIX

Updated: July 04, 2025

## 1. Overview

Genesis AIX is a quantum-secure AI-powered trading platform integrating blockchain, real-time risk analysis, and intelligent onboarding.

## 2. AI Strategy Builder

Supports rule-based, supervised, and reinforcement learning models. Includes real-time backtesting engine.

## 3. Onboarding Flow

Multi-step user onboarding tailored by subscription tier. Includes experience profiling, platform preferences, and strategy customization.

## 4. Middleware API Integration

Supports TradingView, MetaTrader, ThinkOrSwim with bi-directional signal sync via custom connectors.

## 5. Quantum Blockchain Gateway

Post-quantum cryptographic security, AI-based risk interceptor, photonic CPU readiness.

## 6. Component Library

Includes Wallet UI, Strategy Builder, Billing Module, Quantum Indicators, Dashboard Components.

## 7. CI/CD & Deployment

Dockerized microservices with GitHub CI pipeline. Staging and production rollout ready.

## 8. Demo Walkthrough

TradingView signal triggers → MetaTrader confirmation → Gateway route → Quantum validation. UI walkthrough and logs captured.

## 9. Repositories

Core Backend: github.com/genaix/backend  
Frontend: github.com/genaix/frontend  
Assets: github.com/genaix/assets