

# KSBC System Architecture Diagram

KSBC System Architecture (Tri-Level Design)

[ Level 1 – Physical Layer ]

Gold Vaults (insured, audited)

- Gold Agents (testing, purity, serial numbers)
- Vault API (weight, purity, custody logs)

↓ Verified Data → Hash Stored On XRPL

[ Level 2 – Intelligence Layer ]

Bittensor Subnet (AI Oracle)

- Validates vault data
- Anomaly detection
- Price feeds & metadata scoring
- Sends signed verification payload → KSBC Backend

↓ Validated Payload

[ Level 3 – Ledger Execution Layer ]

KSBC Backend (Webhook Engine)

- XRPL Transaction Builder
- Mint/Burn Logic
- Issuing Account Controls
- DEX Routing (GLDX ↔ RLUSD)
- Transparency Dashboard Logging

↓ Final Settlement

XRPL Mainnet

- Issued Currency (GLDX)
- Trustlines + Multi-sign
- AMM/Orderbooks
- Public Audit Trail

User Wallets (Xumm)

- Mint requests
- Redemption flows
- GLDX balance & reserves view