MadeManifest

Engineering Implementation Specification

Astrology, Human Design, Gene Keys Engine

Target audience: Software engineers

Purpose: Direct implementation without additional explanation

Status: Final, authoritative document

1. Scope

This specification describes the deterministic calculation layer for Astrology, Human Design, and Gene Keys (derived from Human Design). The engine calculates objective values only, contains no interpretation or copy, and delivers structured output for further processing.

2. Input Contract

Required input per person: birth_date (YYYY-MM-DD), birth_time (HH:MM), birth_place (name or lat/lon), timezone (IANA identifier). Entered seconds are fixed at 00. All internal calculations use second precision.

3. Time and Astronomy

Use IANA timezone database including historical DST rules. Convert local time to UTC and UTC to Julian Day (UT).

4. Ephemeris

Source: Swiss Ephemeris. Zodiac: Tropical. Objects: Sun, Moon, Mercury, Venus, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto, Chiron, North Node (Mean and True). Derived: Earth = Sun + 180° mod 360.

5. Astrology Module

House system: Placidus. Calculate Ascendant, Midheaven, house cusps. Node policy: Mean Node. Output: planetary positions, houses, ASC and MC.

6. Human Design Module

Snapshots: Personality (birth moment), Design (derived time). Node policy: True Node. Design time calculation uses Sun longitude minus 88° with bisection solver.

7. Mandala Mapping (HD + Gene Keys)

Constants: START 313.25°, Gate width 5.625°, Line width 0.9375°. Mapping via modular arithmetic. Gate sequence is fixed and hardcoded.

8. Human Design Output

Object order is fixed. Output per snapshot: gate and line. Derived structures allowed but no interpretation.

9. Gene Keys Module

Fully derived from Human Design output. Activation Sequence only. Output: key and line.

10. Content Separation

Calculation layer outputs only numeric IDs. Content layer handles meaning. Calculation layer must never know content.

11. Versioning Metadata

All output must include engine version, node policy, dictionary versions, and language.

12. Testing

Golden test cases with fixed input and expected output. Any mismatch is a failure.

13. Non-goals

No rectification, no uncertainty modeling, no interpretation, no UI.

14. Change Policy

Changes to mandala, node policy, design logic, or gate mapping are breaking changes and require spec update and fixture revalidation.

Final Statement

If correctly implemented, output is reproducible, comparable, scalable, and extensible. This document is authoritative.