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

• Gene Keys (derived from Human Design)

The engine:

• calculates objective values only

• contains no interpretation or copy

• delivers structured output for further processing

2. Input Contract

Required input per person:

• birth_date: YYYY-MM-DD

• birth_time: HH:MM (seconds not available)

• birth_place: name or latitude/longitude

• timezone: IANA identifier (e.g. Europe/Amsterdam)

Time policy:

• Entered seconds are fixed at 00

• All internal calculations use second-level precision

3. Time and Astronomy

Timezone handling:

• Use IANA timezone database

• Including historical DST rules

Conversions:

• Local time → UTC

• UTC → Julian Day (UT)

4. Ephemeris

Source:

• Swiss Ephemeris

Zodiac:

- Tropical

Objects (always calculated):

- 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

Houses:

- System: Placidus

Calculations:

- Ascendant

- Midheaven

- House cusps

Node policy:

- Mean Node

Output:

- Planetary positions (degree + sign)

- Houses

- ASC and MC

6. Human Design Module

Snapshots:

- Personality: birth moment

- Design: derived time

Node policy:

- True Node

Design time calculation:

1. Determine Sun longitude at birth

2. Target longitude = Sun − 88° (mod 360)

3. Find time before birth when Sun == target

Solver:

• Bracket: birth − 84 to −90 days

• Method: bisection

• Stop criteria:

■ |sun_diff| < 0.0001°

■ or time interval < 1 second

7. Mandala Mapping (HD + Gene Keys)

Constants:

• START = 313.25° (Gate 1 Line 1)

• GATE_WIDTH = 5.625°

• LINE_WIDTH = 0.9375°

Interval rule:

• Start inclusive

• End exclusive

Mapping:

r = (longitude − START + 360) % 360

gate_index = floor(r / GATE_WIDTH)

line_index = floor((r % GATE_WIDTH) / LINE_WIDTH)

line = line_index + 1

gate = gate_sequence[gate_index]

Gate sequence:

• Fixed array of 64 gates

• Not numeric

• Not calculated

• Hardcoded or config-driven

8. Human Design Output

Object order (mandatory):

1. Sun

2. Earth

3. North Node

4. South Node

5. Moon

6. Mercury

7. Venus

8. Mars

9. Jupiter

10. Saturn

11. Uranus

12. Neptune

13. Pluto

Output per snapshot:

• gate

• line

Derived structures:

• Type

• Authority

• Profile

• Incarnation Cross

Calculation allowed

Interpretation forbidden

9. Gene Keys Module

Calculation strategy:

• No independent calculation

• Fully derived from Human Design output

V1 scope — Activation Sequence:

• Life's Work = Personality Sun

• Evolution = Personality Earth

• Radiance = Design Sun

• Purpose = Design Earth

Output:

• key (gate)

• line

No shadow, gift, or essence logic

10. Content Separation (Hard Rule)

Calculation layer:

• Outputs IDs and numeric values only

• No text

• No meaning

Content layer:

• Key dictionary (1–64)

• Line overrides (optional)

• Lookup by key ID and line

Calculation layer must never know content.

11. Versioning Metadata (Mandatory)

Each output must contain:

• engine_version

• node_policy_per_system

• keys_dictionary_version

• key_lines_dictionary_version

• language

12. Testing

Golden test cases:

• Fixed birth input

• Fixed expected output

JSON fixtures:

• Input

• Astrology expected

• HD Personality expected

• HD Design expected

• Gene Keys expected

Any mismatch = test failure

13. Non-goals

• No birth time rectification

• No uncertainty modeling

• No interpretation

• No UI

• No coaching logic

14. Change Policy

Changes to:

• mandala

• node policy

• design time logic

• gate mapping

are breaking changes and require:

• update of this specification

• revalidation of all fixtures

Final Statement

If this specification is implemented correctly:

• output is reproducible

• profiles are comparable to existing platforms

• the system remains scalable and extensible

This document is authoritative.