



CRYSTALS WHITEPAPER

Version: 2026-01-06

1. For Ease of Entry:

Things to know before jumping in:

1) Tab Width is 5

It strikes the right balance between being not too long and not too short. :)

2) The (“Holy”) Coordinate System:

Rather than using X, Y and Z – we’re using Hebrew:

| | | | | |
|---|---------|----------|---|---------------------------------|
| א | “Aleph” | → aleph | a | “The Divine” - From up to down |
| ב | “Bet” | → veeth | v | “The Text” – From right to left |
| ג | “Gimel” | → gam’el | g | “The Way” – From near to far |

In principle I was bothered by how there’s a “break” when shifting between 2D and 3D; And while I was already re-arranging things I took an extra step.

SCREEN Coordinates: a x v Pixels start at the top-right

PLANE Coordinates: v x g This is a feature, not a strict implementation

3) Hydrogen Units

Looking for a way to “Solve Time and Space” this is however a given. We’re using:

Hydron:

Using the Hydrogen Frequency to derive a value relative to a second. At approximately 1.4x_SCALE10_ oscillations it amounts to approximately 0.7 seconds.

Gi:

Using the “Hydrogen Line” (approximately 21 centimeters) as the base unit of measurement. Fun Fact: Light Speed is 1.000.000.000 Gi per Hydron. Like ... exactly. A Light Hydron is also called ‘Giaga’ (approximately 211.061 kilometers).

4) “Compatibility Tokens”

Although there is no real use for us here or

now, I deemed it necessary to come up with terms for “CPU register tokens” independent of their size (in bits). After some back and forth, only unsigned values are used. For signed we just take the closest of our kind.

- dega The smallest addressable unit
- twin Two dega
- split A Half wide
- wide The fill of a register

5) Custom Units

A minute is regarded to have 100 seconds. But seriously. If you ask me, Gibibyte and such nonsense doesn't exist. On bits it makes sense. But to say that just because it's “kilo” it has to be 1000 is ... that couldn't have come from someone who actually has to deal with this. In short: We don't do that here! So:

- siKiByte** **1000 Byte**
- siMiByte** **1000 siKiByte**
- siKiMiByte 1000 Kilobyte
- siGiByte** **1000 siMiByte**
- siKiGiByte 1000 siKiMiByte
- siMiGiByte 1000 Megabyte