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Time Since Launch

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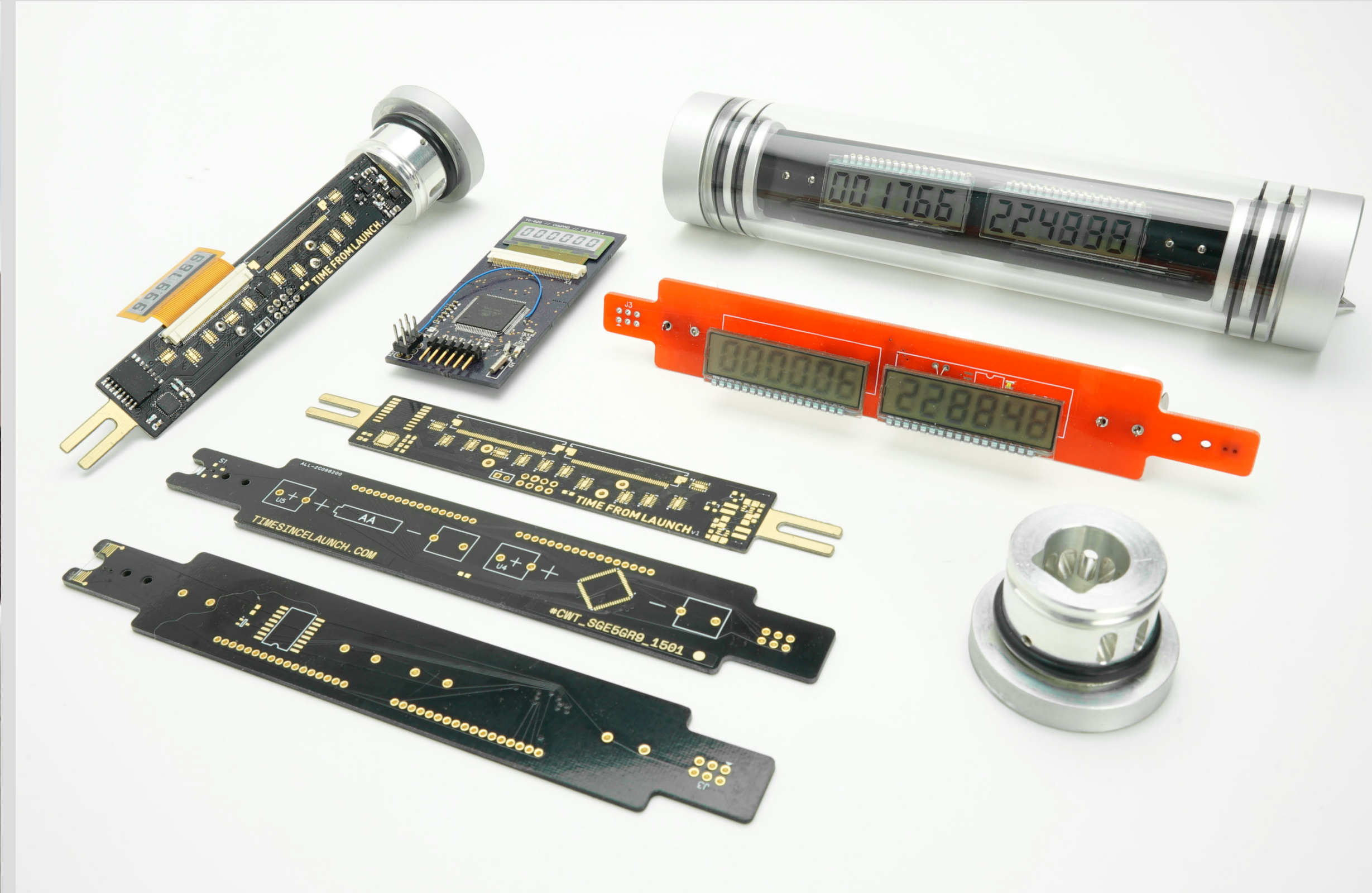
A single use long scale launch clock to mark the beginning of an epoch. Pull the launch pin to start counting seconds, minutes, hours and days up to 1 million days (2,736+ years).

Launch your epoch the moment you get married, have a baby, quit smoking or on an ordinary Tuesday morning.

Materials : aluminum (6061-T6), stainless steel (303), borosilicate glass, silicone, PCB and electronic components



Time Since Launch changes our relationship to time. It gives everyday access to a perspective shift from a single, personal, fleeting moment to a timescale greater than several millennia.



First conceived as part of Che-Wei's thesis at MIT Media Lab, Time Since Launch is off the grid, both in terms of power and its ability to keep accurate time. Unlike your phone, it is entirely self-contained; and it doesn't rely on an external, surprisingly fragile multi-billion dollar timing and power infrastructure. The assembly of parts, from physical materials to electronic components, were selected with longevity in mind. Once launched, that moment in time is burned into the chip's silicon.



With electronics optimized for longevity, Time Since Launch keeps counting.

We've estimated Time Since Launch will last on their original batteries for approximately 40 years.

To arrive at this calculation, we took the batteries' stated capacity of 3,500mAh, rounded down to 3,000mAh (to be conservative), divided by 6uA, which gives you 57 years, and then took off another 30% (to account for external factors), which gives you 39.9 years.

Change the batteries without losing time.

Six months your batteries will die, a low battery icon on the display will appear. We've engineered the backup capacitors to keep the real-time chip powered and running without losing time during the battery swap.



To mitigate failure points, Time Since Launch consists of minimal and essential electrical components.

Mounted on a matte black PCB with gold-plated traces, TSL has 2 chips, some passive components (resistors, capacitors + diodes) and two 6-digit LCDs and batteries. That's it.

It draws less than 6uA (microamps) of current running at 3.3 volts. This gives it an energy usage of about 20 microwatts (millionths of a watt).

±2ppm accuracy.

Time Since Launch uses an Epson RX8900 real-time clock chip with a temperature-compensated crystal oscillator. At room temperature, it's extremely stable and can hold its frequency at less than ±2 parts per million (ppm). It's 10x more accurate than a normal wristwatch crystal with an accuracy of ±20ppm.

If you shot a basketball from a court in NYC to a hoop in Philly with ±2ppm accuracy, you would miss by less than 10 inches.



We like to think of this project as an art piece disguised as a consumer product.



Thousands of Time Since Launches have made it into peoples hands, marking promises, weddings, births, retirements, graduations, endings, beginnings, and more. We're so lucky to be living in a time when a small studio like ours can take an idea, work out all the design, engineering, manufacturing, marketing, and logistics, to bring a concept product into the real world. To us, this project represents a possible future of how design studios operate, where nearly everything is done in-house to maintain a cohesive vision and deliver a curious narrative shift, transforming our lived experience.