

June UV Sensor Bracelet Teardown

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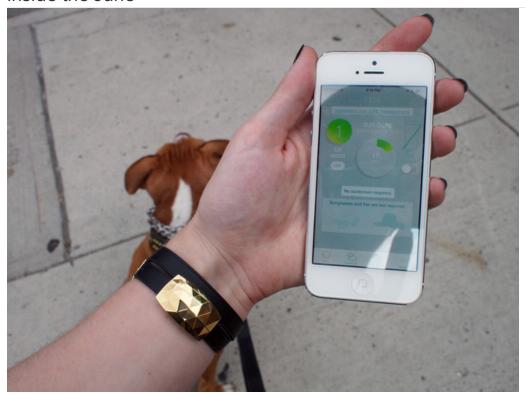


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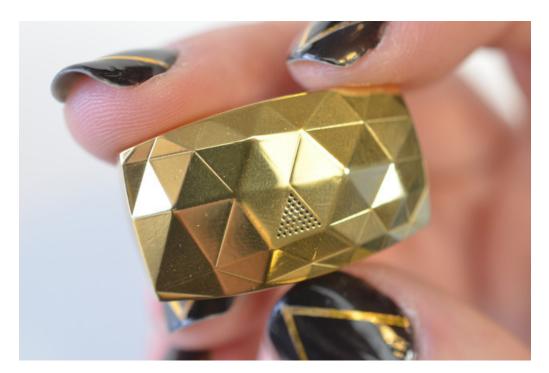
Inside the June



June (https://adafru.it/dNt) is a UV exposure sensing bracelet by Netatmo. It communicates over Bluetooth low energy to iOS devices, tracking your exposure over time and triggering reminders to reapply SPF. The battery recharges over USB and lasts a month.



The tiny clip easily passes as jewelry, and one of the shiny facets has some holes that let lights in to the UV sensor.



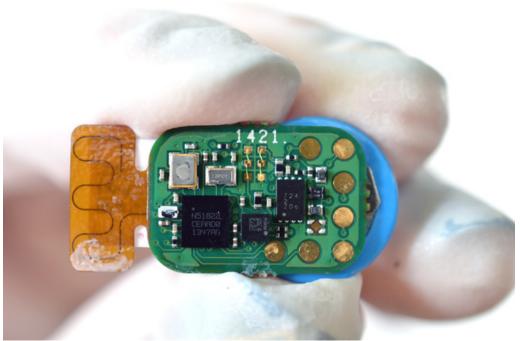






We tried to get inside using my typical prying and cutting tools, with no luck. After two hours soaking in acetone, June popped right open.





We used a USB microscope to identify parts on the board:

- NRF51822 Nordic bluetooth low energy ARM cortex chip
- 16 MHz crystal
- 32 KHz crystal
- flex PCB antenna
- SWD programming pads
- CR1220 rechargeable coincell
- battery charging circuit
- UV LED die
- opamp

