



Myo Armband Teardown

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<https://learn.adafruit.com/myo-armband-teardown>

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Table of Contents

[Inside Myo](#)

3

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The [Myo armband](https://adafru.it/Cgg) (<https://adafru.it/Cgg>) is a gesture controller that triggers a variety of actions on the computer based on the contractions of your muscles and the movements of your arm. It is intended for a variety of applications like controlling a slideshow presentation, controlling video playback while you're AFK, gaming, and more. We couldn't help but peek inside to take a closer look at how this interesting design was put together.



Inside the box is the Myo armband itself, some size-adjusting clips, bluetooth dongle, USB cable, and info card.

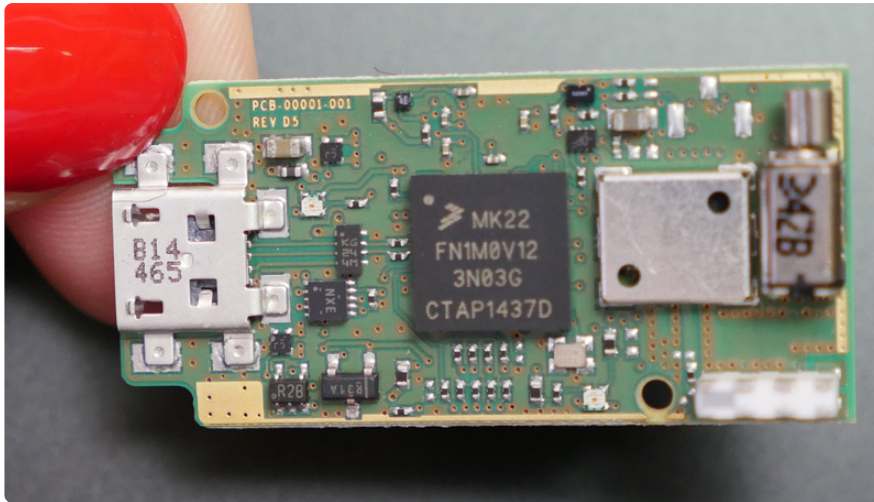


Upon clipping through the rubber gasket to unfold the ring, the EMG electrode units were unveiled.

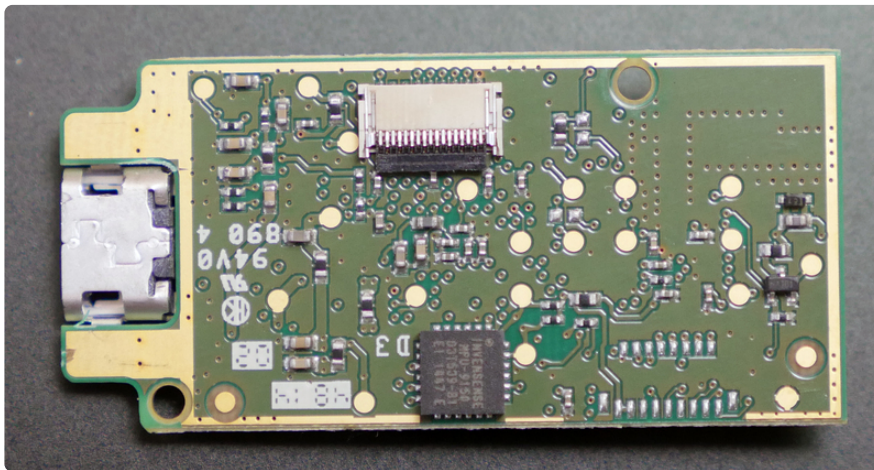


Inside each cubby was a small circuit board, and there are two batteries tucked in different cubbies.

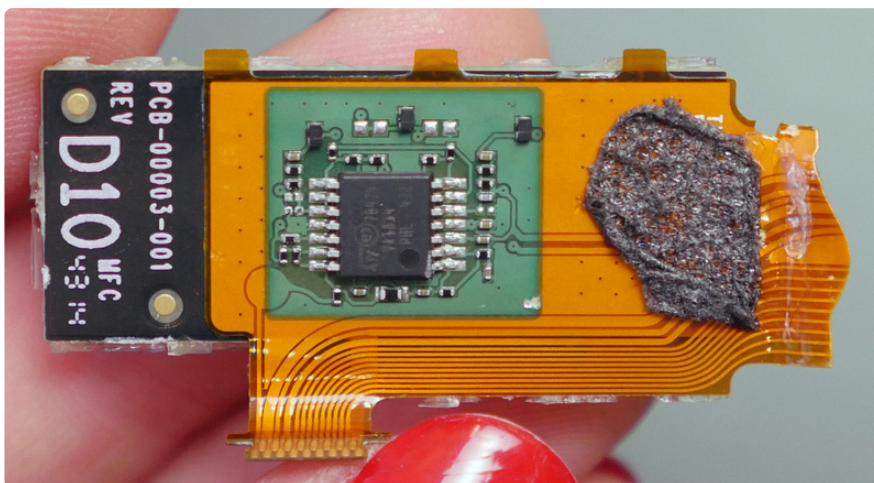




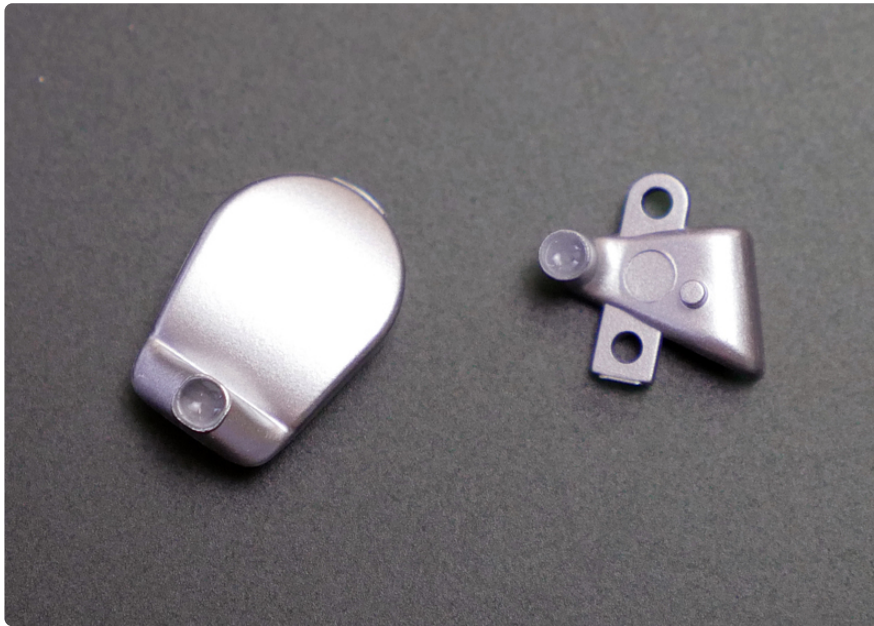
On the front of the main board we found a MK22FN1M0 - [Freescale Kinetis Cortex M4 120MHz \(https://adafru.it/Cgh\)](https://adafru.it/Cgh) processor, a NRF51822 bluetooth low energy transceiver/processor under a can, and a vibration motor.



On the back there's an [Invensense MPU-9150 9-dof motion sensor \(https://adafru.it/Cgi\)](https://adafru.it/Cgi)



On each sensor board we found a precision quad opamp connected to the very elaborately shaped flex PCB.



Two light pipes translate the surface mount LEDs to the Myo logo and indicator light on the exterior of the device body.

What an interesting design! We enjoyed taking apart this complex wearable device.