The Nintendo Wii. One of the most infamous early age videogame consoles following the Nintendo GameCube, Xbox 360, and the PlayStation3. Nearly everyone in the 2000’s had one and anyone who didn’t wanted. Of course, having the opportunity to use this console for our project, we took it and proceeded to disassemble the Wii.

The first thing we see is the optical drive and its board. The optical drives board has 16 megabits of SDRAM and computes and sends information to the Wiis motherboard. The motherboard is just passed the metal casing right under the optical drive. Both boards have Elpida brand RAM. Elpida is a Tokyo Based company that manufactures and sells DRAM or also known as Dynamic Random Access Memory products. Next to the motherboard, one layer above, are the plugs. There are 6 ports. A power port, the sensor bar port, an HDMI, video outlet, and two USB slots. After tearing down the rest of the wii, we’re left the main motherboard of the wii.

On the top side of the motherboard, the first thing you’d notice are the stock voltage regulators on both the front and backside of the motherboard. Voltage regulators are used to control the amount of electricity used throughout a machine. Right next to the voltage regulator is the WIFI module. The Nintendo Wii takes a WIFI module made by the Hon Hai Precision Industry. Right above you can see the MX chip. MX stands for Multimedia eXtention. Very similar to a standard CPU but simplified and modeled to maximize low-power consumption. Directly above and to the left of the MX chip is the Bluetooth module. The Bluetooth module is also produced by Hon Hai Precision. Directly to the right of the Bluetooth module are the disc drive connectors. These connect the main motherboard to the optical drive board. The optical drive board takes the information from the disk that’s entered, sends that to the main motherboard for translation into video and sound.

Going back to the main motherboard, next to the disc drive connectors is the LDO or Low-Dropout Regulator. This is used to regulate the outputs of the console and provide noise filtering and a constantly stable output. Right next to the LDO is the RAM. Directly to the right is the GPU. A GPU is a Graphics Processing Unit. This makes the graphics look nice. Under the GPU is the CPU is the brain of the device and contains all the data and processes inputs. This holds all the long-term information of the console. After flipping the motherboard for access to the backside, you can see the AVE, Audio Pre-Amp, and NAND. The AVE organizes different radio waves and sends them to their respected devices within the console. Finally, the NAND is the most common type of flash memory.

Through the teardown of the Nintendo Wii, we found the root of many of our childhoods and what makes the console that entertained us for days on end run.