



Fisher Price Laugh and Learn table Teardown

[April Fools ...]

Teardown of FisherPrice Laugh and Learn Around the Town table, mid-2016 model [posted on April 1]

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This document was generated on 2019-09-17 08:37:28 AM (MST).

INTRODUCTION

In this teardown we will reveal the internals of this wonderful device, and see what is driving the realistic graphics, LEDs and 120+ sound effects

TOOLS:

- [Phillips #2 Screwdriver \(1\)](#)

Step 1 — Overview



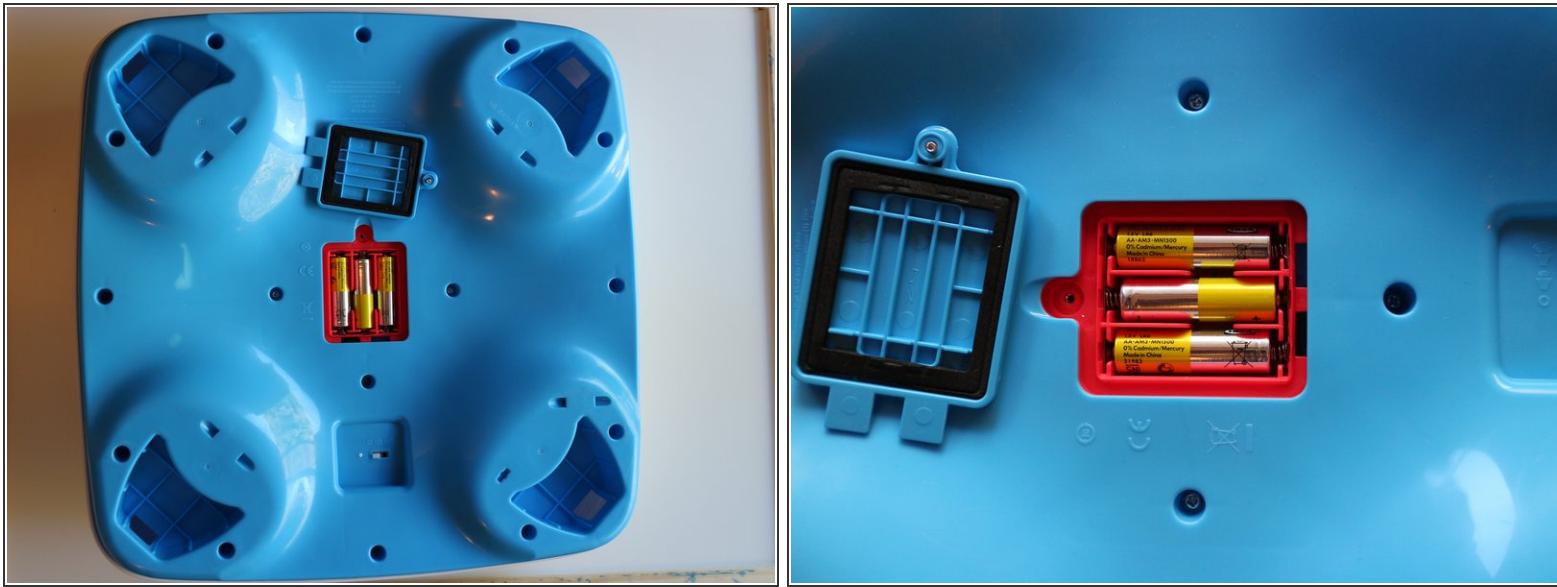
- The table has 4 different play regions: Puppy's home, the market, the zoo and the farm
- It also has the phone. Designed to call Puppy and friends.

Step 2 — Detaching the legs



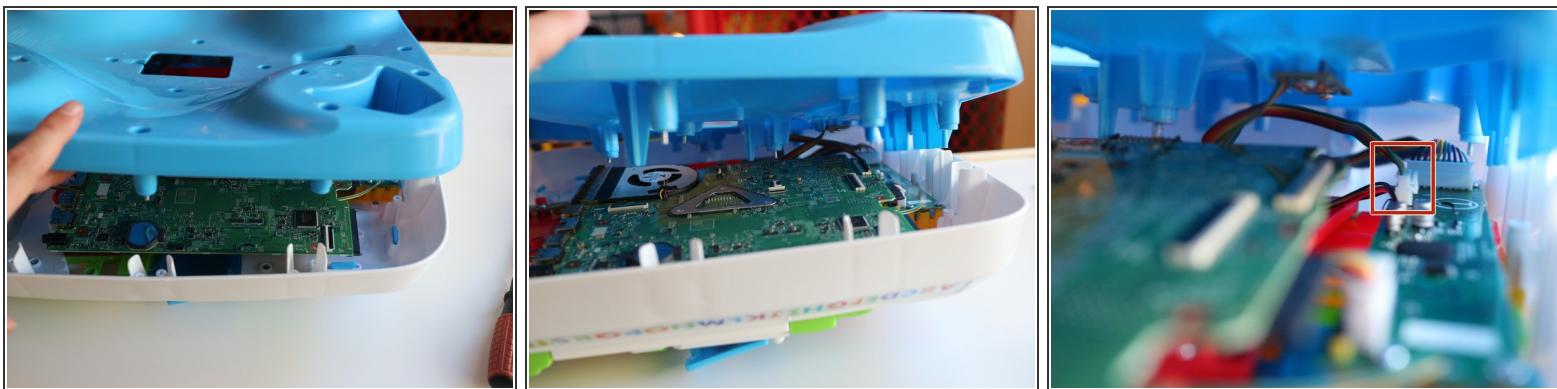
- All 4 legs removed
- Each leg has a giant clip, that holds it in place. There is a neat tab to detach it from the table (see pictures)

Step 3 — The batteries



- "Laugh and Learn" is powered by 3 AA batteries
- Depending on usage and type of the battery they deliver between 3 to 24 months of fun
- The battery compartment has a gasket to protect the batteries from water (or other liquids) - very thoughtful of a typical user

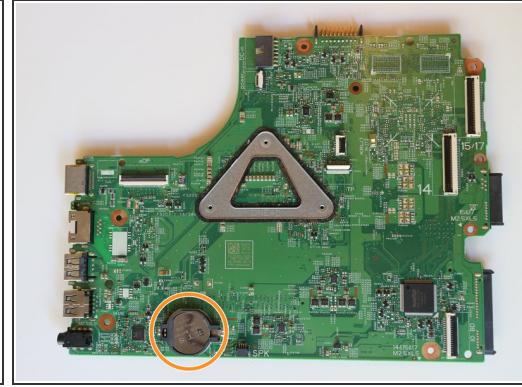
Step 4 — Peeking inside



- After unscrewing 16 screws we can finally lift the bottom side
- **⚠️** But be careful! There is a wire going from on/off switch that should be detached before removing it completely
- The on/off switch wire connector

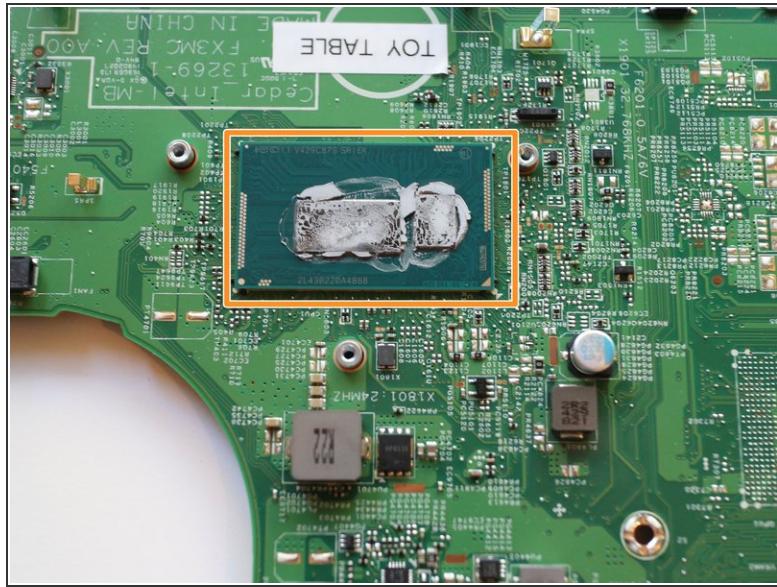
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Step 5 — The main board



- We love modular design!
- The internal side of the main board features:
 - 60mm fan assembly with a single heat pipe and a tiny radiator
 - Authenticity label
 - Mini PCIe slot for wireless communication
 - DDR3 RAM slot, to buffer the audio effects
- On the front side there is a tiny battery, that is probably used to back-up language settings

Step 6 — more details



- After removing the heatsink-and-fan assembly, the CPU is revealed
 - Intel i3-4005U CPU, featuring 2 cores (4 threads) running at 1.7 GHz and integrated HD4400 graphics, delivering the realistic experience of moving and talking animals and providing fast response for every button pressed on the device
 - The CPU is soldered down to the board, so there are no possible upgrades here
 - The wireless is powered by Qualcomm Atheros QCWB335 2.4GHz SB 1x1 Wi-Fi + BT 4.0
- *(i)* This is mid-2016 model. Nowadays mPCIe is obsolete, as all the major vendors use M.2 form factor.

Step 7 — The phone



- This is a standard model used for Laugh and Learn. For privacy reasons there are no cameras on this phone. Major specs:
 - Android 6 (Marshmallow)
 - 3.5" e-paper display. Our team was surprised by the quality - it really looks like a paper sticker!
 - 2 buttons: home and back
 - Snapdragon 600 series chipset with 3G modem

Step 8 — Summary



- The device is firmly built and easy to disassemble/repair. The only drawback is soldered down CPU
- If we were asked about repairability score - the answer is 17
- Thanks for reading this teardown!