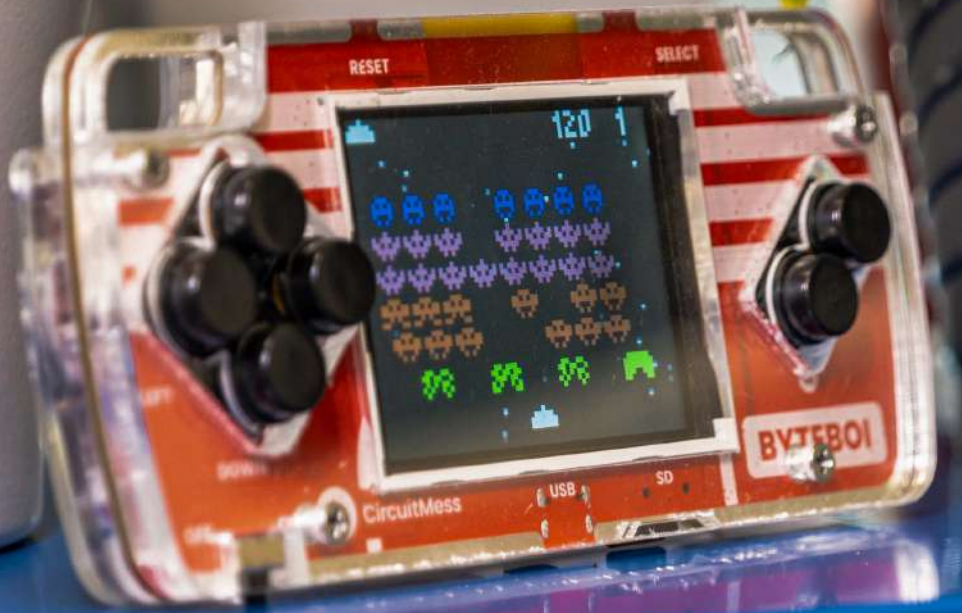
Creator's booklet



CircuitMess

BYTEBOI

Meet ByteBoi

ByteBoi is a DIY retro game console that will teach you about electronics and coding in a fun and exciting way

HOW IT WORKS?

1. Assemble your own game console
2. Insert the included Li-Po Battery
3. Play retro games
4. Code your very own games

What will you learn?

- How to solder
- How game consoles work
- CircuitBlocks & C++ coding
- The basics of game graphics
- How to code a microcomputer
- How to make your own video games

RESET
SELECT
LEFT
DOWN
OFF
CircuitMess
USB
SD
BYTEBOI

A brief history of handheld game consoles

American toy company **Mattel** released **Auto Race** - the first digital handheld electronic game

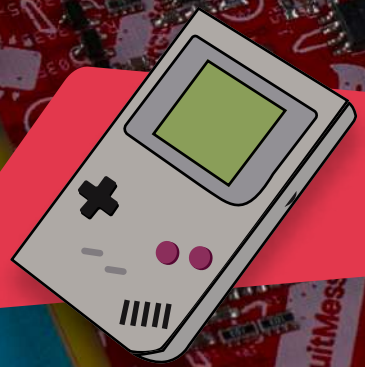
1976

The first commercially successful handheld console was **Merlin** from **1978**, which sold more than

5 million units

Nintendo releases the **Game Boy**. Everybody loses their minds

1989



CircuitMess launches its first DIY handheld game console - **MAKERbuino**.
A new era of history begins :)

2017

What is CircuitMess?

CircuitMess started in 2016 when Albert (our CEO) was 17 years old.

Albert loved tinkering with electronics and one of his first projects was a DIY game console.

People really liked the idea so he decided to launch it on **Kickstarter** where it raised $100,745!

After that, **CircuitMess** was born.
We are a small and fast-growing team of tech lovers who wish to share our love of creating new technology with the rest of the world!

Behind the name

"Circuit" is a reference to electronic circuits. "Mess" is what best describes our workplace. Combine the two and you get CircuitMess!

You can do it!

CircuitMess

All of our kits are designed, manufactured, and packed in Croatia!

Our mission

Everybody knows how important technology is, but less than 1% of the population knows

HOW TO MAKE

new technology.

We're here to change that!

With our kits, we want to inspire people to be **CREATORS**, instead of just consumers.

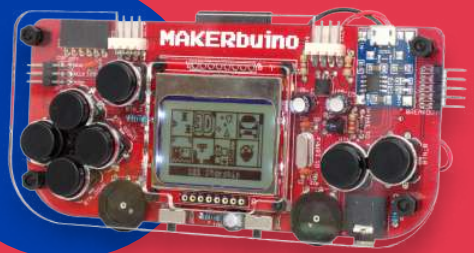
What's inside the box?

In the ByteBoi kit, you will get all the components & tools necessary to make your very own game console!

1 Main circuit board	2 Acrylic casing	3 USB-C cable
4 Li-Po battery	5 Pushbuttons	6 Button caps
7 Screws, bolts, spacers	8 Speaker	9 On-off switch

How ByteBoi came to be

2017



MAKERbuino was launched and sold to over **12,000 customers** all around the world!

It had a black and white screen, 2kB of RAM, 8-bit CPU, and lots of fun games to play.

2020

Nibble was a new and improved version of **MAKERbuino.**

It had a color display, was easier to assemble, and came with all the necessary tools included in the box.

2021

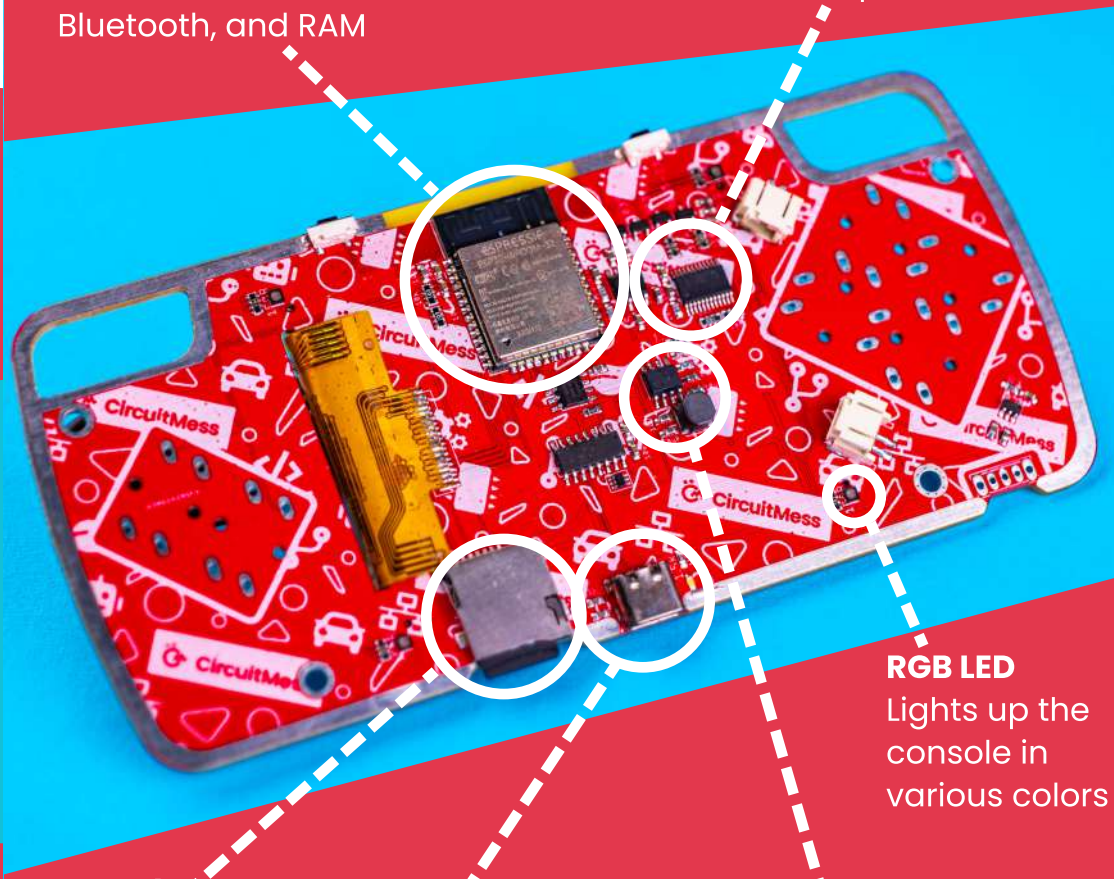
ByteBoi is our most complex game console so far.

With a dual-core CPU, WiFi, and Bluetooth included, it will satisfy both existing and new makers.

ByteBoi has lots of tiny bits and pieces

ESP32
This little guy has a dual-core CPU, WiFi, Bluetooth, and RAM

PCA9539
This chip handles all the input readings from pushbuttons



RGB LED
Lights up the console in various colors

SD card
All the games are stored here

USB-C port
Enables you to charge the console and connect it to your computer

Voltage regulator
Most of the chips on this device need a stable voltage of 3.3 volts to work. This part makes that happen.

Your ByteBoi can be coded in CircuitBlocks

CircuitBlocks is a **graphical coding-learning app** with a Scratch-like interface where you can connect logic blocks to generate code.

Head to:

circuitmess.com/circuitblocks

Safety first!

Before you start with the assembly, pay attention to the following safety measures:

1. Using products provided in this electronic kit is **not recommended for children under the age of 11.**

2. **Keep this product away from young children!** This product contains components that are dangerous for children under the age of 3.

3. If you are a minor, use this product **with the help of an adult.**

Soldering iron gets hot! Use it with extra caution and keep it away from young children and flammable materials!

Be careful with the batteries!
Do not scratch, disassemble, damage, or heat the included battery!

CircuitMess ByteBoi is a fun introduction to the world of real electronics, but **it is not a toy for toddlers!**

Strictly follow all the instructions you received in this kit and those found on our online pages so that no one gets hurt.

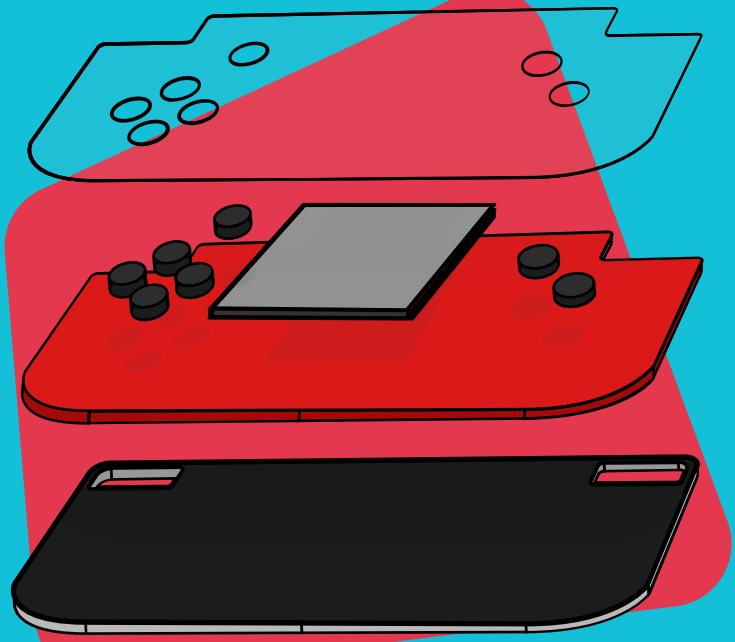
If you have never used a soldering iron or a screwdriver before, **carefully follow the assembly instructions** on our website and, if necessary, ask someone more experienced or older to help you.

If you are having problems with your kit, contact our customer support via email at **contact@circuitmess.com**

Happy soldering!

To build your ByteBoi, go to:

circuitmess.com/build



CircuitMess

BYTEBOI

RESET
SELECT
BYTEBOI
Wheelson RC
CircuitMess
USB
SD
CircuitMess