# **ROBOHEART TECH SPECS**

### **Features of RoboHeart Hercules:**



- ESP32-WROOM32 with dual-core and WiFi+Bluetooth capabilities
- Arduino compatibility for easy programming
- An integrated Inertial Measurement Unit (IMU) for motion data
- Three DC motor outputs
- USB-C connector with auto-download feature: flashing is a piece of cake!
- LiPo battery input with auto-charging feature: where do you need Power most, at USB or LiPo? RoboHeart will automatically distribute power where it is most needed
- Convenient peripherals for Makers: GROVE, JST, JTAG and more!



Check out how to replace your own board on Instructables! Step-by-step instructions are HERE.





#### ESP32-WROOM32

**Powerful microcontroller with** two cores and Bluetooth+WiFi stack.

It is compatible with Arduino IDE, has many GPIOs and a lot of cool other features!

**Dual power!** 

A JST-PH connector for a single cell Lipo battery and a micro USB-C for power.

You can use either of them or both at the same time.

Lipo gives more power when needed. Charge the Lipo through USB as well.





**Convenient Grove connectors for** serial interface like UART or I2C...

... or for anything else you may



#### imagine (including micro servos!)



A JTAG connector for the professionals!

**RoboHeart is the only third party board** which has a JTAG interface to the ESP32.

Allows you to do advanced tasks, like debugging and changing variables at runtime.

Would you like to see even more tech specs about RoboHeart Hercules? Visit the TECH-SPECS and FAQ drop-down menus on <u>www.roboheart.de</u>.

# **COOL STUFF FOR MAKERS**

### **RoboHeart Basic BLE APP:**



Did the idea of controlling the RC car with your smartphone impress you, but you aren't yet an Android developer? No problem! We provide you with the .apk for our BLE control app... and it's also available on PlayStore.

## **Community Source Code:**

If you are an experienced Maker, orifyou would like to be come one, you can check out our source code on Github as well: <u>https://github.com/Augmented-Robotics/roboheart-arduino-library</u>



## Your imagination is your limit!

For inspiration, we thought we'd share our original Balancing Bot with you:

https://youtu.be/Tzq-gAMsTqI



# SO... WHAT WILL <u>YOU MAKE WITH ROBOHEART?</u>

We would love to know! Submit your creations to campaign@roboheart.de, and we may feature them on our website.