





# eeRoots in a nutshell

### <u>eeRoots's Mission</u>

eeRoots designs and creates simple, educational and integrated electronics for engineers, students and hobbyists. It strives to make technology simple, integrated and fun, with the purpose of eliminating the complicated tech barrier that the new generation faces.

#### Story

eeRoots started out over a discussion on how complicated, time consuming and expensive it was for someone to create a tech project – be it a home automation project, technical data logging or just a simple and fun educational Arduino creation. It was also a University spin off that built on a final year project at the University of Malta.

The problem with modern tools is not that they're not accessible, it's that to use them you need a lot of effort and know-how. On top of that, most prototyping boards require additional sensors or boards in order to actually do something useful with them. These have to be connected with wires, something all too familiar for an engineer or a hobbyist. It's a time consuming and inefficient process. So we thought we'd solve that problem by creating an integrated platform. Thus, eeRoots, which stands for "Electrical Engineering Roots", was born. The name derives from the fact that the core product, eeMod, and the entire market stem from this field.

### eeMod

eeMod is the first and main product of eeRoots. It's an Arduino compatible development platform designed to have the most commonly used sensors by the open source community. Designed to be the first and last development model needed, the eeMod replaces complicated stacks of boards and wires with a simple integrated platform that contains 10+ sensors.

The eeMod platform is divided into two Printed Circuit Board (PCB) modules – a controller module and a sensor module that together create a convenient and flexible prototyping board packed with functionality, including:

Bluetooth 4.0, Wi-Fi, Infrared Sensors, Motor Control, Light Sensors, Color Sensor, Compass, Gyro, Accelerometer, SD Card slot, Power Supply and USB; all in one single module that is small enough to fit in the palm of your hand.

Realizing that programming flexibility is key to project evolution, the eeMod includes an ATmega2560 to make it Arduino compatible but it isn't limited to one programming language. Depending on the controller used, eeMod works with other languages such as C, C++ and VHDL. It is designed to grow and evolve with any project, starting with simple programming languages and adding more complex and powerful ones as needed by simply unplugging the Top Module and plugging in a more powerful one.



#### <u>Where to Buy</u>

eeRoots will be launching their crowd funding campaign on Indiegogo on the 7<sup>th</sup> of April 2016. Different perks are offered, including early birds. The campaign will be available on this link: https://igg.me/at/eemod

Here's a breakdown of the rewards:





You'll get the Bottom Module. Arduino compatible. It includes **all** sensors:



3D Accelerometer 3D Gyro 3D Compass 2 x Motor Driver 2 x Speed Encoders

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THE OWN

Wi-Fi Bluetooth 4.0 8 x IR Sensors 2 x Light Sensors Color Sensor USB Communications Micro SD Card Connector Single Cell LiPo Charger Female Headers LiPo Battery Connector

This is it!



ATmega2560 Microcontroller RGB LED TX, RX, General Purpose LED Headers to connect extra modules Programmer Port

Everything in "This is it!" perk **plus** 2 x 4.3cm diameter plastic wheels, 2 x DC motors 400rpm, 600mAh LiPo battery, 0.5inch Pololu Ball Caster, ABS 3D printed plastic cover

Make it special!	
Multiply the fun!	5 x "This is it!" Perk
Make a Team!	5 x "Make it special!" Perk
Make a Larger Team!	10 x "Make it special!" Perk

#### Reuben Ferrante (Founder)

Reuben started eeRoots briefly after finishing his 4 year undergraduate engineering degree at the University of Malta. Having a keen eye for product design and a love for programming, eeMod was built from scratch after several prototypes and improvements. He has held previous engineering intern positions at CERN and TDK and lists electronic design and programming as mechanical modeling as his key skills that helped shape eeRoots.

#### <u>Jessica Millo (Marketing)</u>

Jessica majors in Psychology and is part of the team at eeRoots. She makes sure that everything at eeRoots is presentable, well laid out and ready to be launched. She also handles social media and the press. She will soon be ready with her Masters degree at the University of Malta.

Chris is Head of Marketing and Business Development at NOA Labs, and applies his sharped skills into eeRoots in order to make their project eeMod as successful as possible. Running an experienced team of designers and marketing specialists, he makes sure every crowdfunding campaign is fully funded.

## Handling Manufacturing

eeRoots have partnered with NOA labs, a top German-based manufacturing company in China in order to effectively manufacture eeMods with the highest quality. NOA labs will also make sure that eeMods are delivered to customers. This partnership balances eeRoots manufacturing needs and ensures product quality. NOA labs have previous experience with crowd funding and come from a background of getting different products to market in a very efficient way.



#### <u>Contact</u>

Main company emails:

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## DISCLAIMER

This evaluation board/kit contains FCC compliant modules that fall under part 15 of FCC rules. FCC ID: 2AB6YHM-1011 FCC ID: 2ADUIESP-12

Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

This evaluation board/kit contains a CE compliant module that falls under EN 60950 (Safety), ETSI EN301 489 (EMC),

#### and ETSI EN300 328 (Radio) of CE rules. Certification Number: BCTC-141212468

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