

### **PRESS RELEASE**

18 MAY 2013

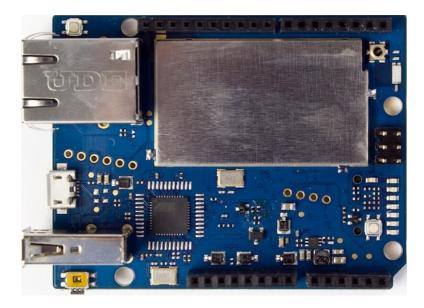
INFO:

PRESS@ARDUINO.CC

HI-RES PICTURES:

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# THE REVOLUTIONARY FAMILY OF WIFI PRODUCTS COMBINING ARDUINO WITH LINUX IS HERE



Arduino Yún is the first member of a new groundbreaking line of wifi products combining the power Linux with ease of use of Arduino.

Yún means "cloud" in chinese language as the purpose of this board to make it simple to connect to complex web services directly from Arduino.

The first Arduino Yún is the combination of a classic Arduino Leonardo (based on the Atmega32U4 processor) with a Wifi system-on-a-chip running Linino (a MIPS GNU/Linux based on OpenWRT).

Designed in collaboration with Dog Hunter, a company with extensive experience with Linux, the board adopts the linino distribution which provides signed packages to ensure the authenticity of the software installed on the device.

We embedded the Linux machine directly on the PCB of the Arduino Leonardo and we connected the two so that from Arduino it's very easy to run commands on the Linux side and use it as an Ethernet and Wifi interface.

Historically, interfacing Arduino with complex web services has been quite a challenge due to the limited memory available. Web services tend to use verbose text based formats like XML that require quite a lot or ram to parse. On the Arduino Yún we have created the Bridge library which delegates all network connections and processing of HTTP transactions to the Linux machine.



## PRESS RELEASE

ARDUINO YÚN 云

To make it even simpler to create complex applications we've partnered with the innovative startup Temboo which provides normalized access to 100+ APIs from a single point of contact allowing developers to mix and match data coming from multiple platforms (for example Twitter, Facebook, Foursquare but even FedEx or PayPal).

The board can be programmed with an USB cable in the classic Arduino way or through the Wifi connection without the need to physically access the board. The new Arduino 1.5.x IDE has the ability to detect any Arduino Yún connected to the local network. Clicking on the name of board and inputting a password is all it's needed to program a board.

Arduino Yún will be available at the end of june; its price will be 69\$ + Taxes.

### **TECHNICAL SPECIFICATION**

Microcontroller ATmega32u4

Operating Voltage 5V

Input Voltage (recommended) 5V via microUSB or PoE 802.3af

Input Voltage (limits) 6-20V
Digital I/O Pins 14
PWM Channels 7

Analog Input Channels 6 (plus 6 multiplexed on 6

digital pins)

DC Current per I/O Pin 40 mA
DC Current for 3.3V Pin 50 mA

Flash Memory 32 KB (ATmega32u4) of which 4

KB used by bootloader

SRAM
2.5 KB (ATmega32u4)
EEPROM
1 KB (ATmega32u4)

Clock Speed 16 MHz

- Embedded Linux machine
- MIPS 24K processor operating at up to 400 MHz  $\,$
- DDR2 32MB Ram and 8 MB SPI Flash
- Complete IEEE 802.11bgn 1x1 AP or router
- USB 2.0 host/device
- poE compatible 802.3af
- MicroSD card support



## WWW.ARDUINO.CC WWW.ARDUINO.CC/BLOG

# TWITTER @arduino @arduinoblog

# ARDUINO, THE FIRST WIDESPREAD OPEN SOURCE HARDWARE PLATFORM, WAS LAUNCHED IN 2005 TO SIMPLIFY THE PROCESS OF ELECTRONIC PROTOTYPING.

It enables everyday people with little or no technical background to build interactive products.

The Arduino ecosystem is a combination of three different elements:

A small electronic board manufactured in Italy that makes it easy and affordable to learn to program a microcontroller, a type of tiny computer found inside millions of everyday objects.

A free software application used to program the board.

A vibrant community, true expression of the enthusiasm powering the project. Every day on the <a href="https://www.arduino.cc">www.arduino.cc</a> website thousands of people connect with other users, ask for help, engage and contribute to the project.

#### **DOG HUNTER**

FOUNDED IN 2011 BY A TEAM OF PIONEERING ENTREPRENEURS FROM THE WORLDS OF ENGINEERING AND SEMICONDUCTORS.

Dog Hunter goal is to create a perfect simple home automation control system. Dog Hunter's founders made a bet on an automation control system platform completely different than current industry practice, a technology most industry experts at the time considered to be impossible to execute. Dog Hunter is headquartered in Boston, Massachusetts, subsidiaries are in EMEA (Zug-Switzerland) and APAC (Taipei-Taiwan) with team members working remotely from all around the world. http://doghunter.org

