

# Linux, Wifi Appliance For MCUs

## MS12







#### **OVERVIEW**

The Dragino lets you embed Linux into your MCU project. It is a low cost, open hardware Linux motherboard for microcontrollers. It runs Linux, using OpenWRT, and has full Ethernet and 802.11b/g Wifi capabilities.

The goal of the Dragino is to solve the connectivity problem and greatly enhance microcontroller products such as the Arduino.Dragino has a powerful 180MHz CPU, 8M flash, 32M RAM, Ethernet, Wifi and runs OpenWRT firmware.

#### **Features**

- OpenWrt Linux inside
- Processor: 180MHz, MIPS 4K
- Open source and full SSH access
- Built-in Web server
- Wifi AP, Client or Ad-Hoc mode
- Remote control and update MCU
- Update sensor data to Pachube
- Store sensor data to local file
- Dynamic DNS (DDNS)
- Built for commercial deployment

## Type Approval

- FCC: Part 15 Subpart B, Subpart C
- CE: EN55022/EN55044/EN61000
- R&TTE: EN60950/EN62311/EN301489/ EN 300328

#### Interface to MCUs

- 12 position screw terminal
- 5 GPIOs from CPU,
- SPI interface
- UART interface
- 3v/5v/raw(9~15v) power
- Cold Reset to CPU
- One LED dedicate for MCU

### **Specification**

- · 8MB Flash, 32MB SDRAM
- 1 x 10/100M Ethernet port
- DC input: 9~ 15v
- Wifi: 802.11 b/g
- Wifi power: 20dbm
- Frequency band: 2.412GHz ~2.472 GHz
- External antenna
- 12 input/ output to sensors

### **OpenWrt Inside**

Built upon on a mature, open source linux distribution to speed up the development and debug process

## **Open Hardware**

Possibility for modify / innovation and provide an unique product to the market

## Flexible Interface to MCUs

Provides flexible interface to MCUs for easy development, SPI/ GPIO/ UART, 3v/5v/raw (9 ~ 12v) power