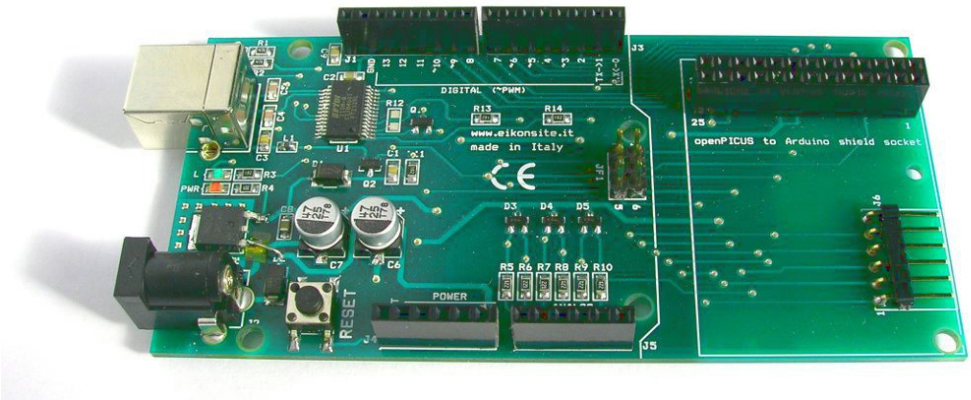
Introduction

Arduino is based on Wiring open source standard that defined the concept of SHIELD. A Shield is a specific board with a standard pin-out. There are lot of Shields on the market and using our Arduino shield socket board you can use all of them with openPICUS modules.

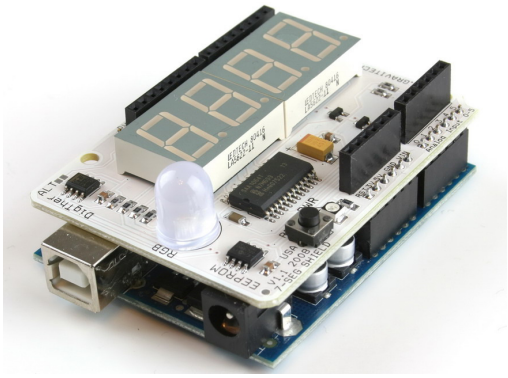
A wide range of wireless applications can be easily developed and run on Flyport with openPICUS IDE and no Wi-Fi expertise is needed. The IDE allows to focus on application as openPicus framework, which is based on freeRTOS, manages the Wireless stack and its events.

Flyport is available with PCB antenna or with uFL Connector to use an external antenna.

Flyport module is not included.



This is a typical Arduino shield



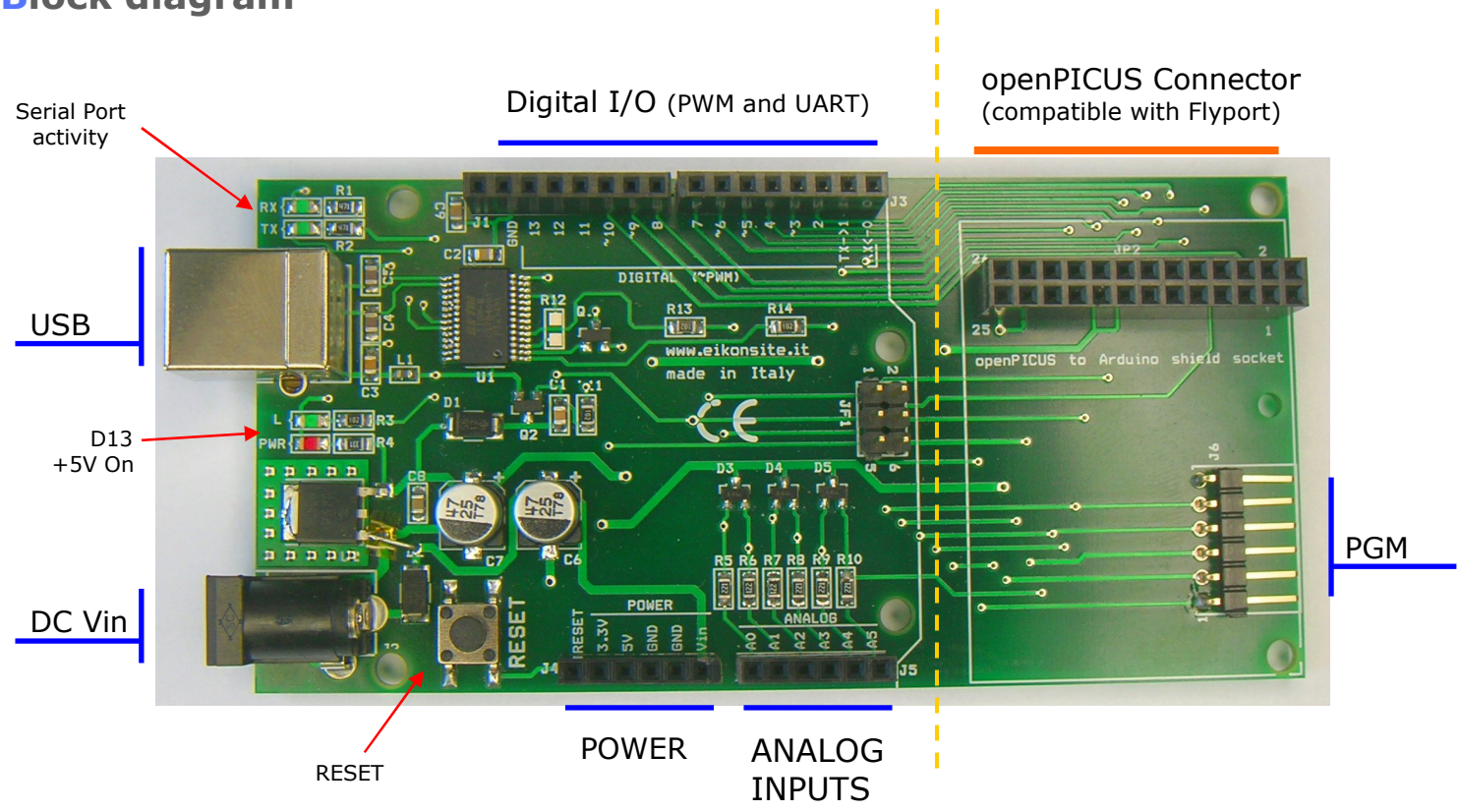
NOTE
Library and code for each Arduino shield may be not available, please check in www.openpicus.com website

Benefits
- Use your Arduino shields
- Fastest way to prototype
- Fast development - free IDE
- Open source

Applications
- Internet of things
- Wi-Fi sensors
- Wi-Fi automation
- Wi-Fi enterteinment

Features
- Fast prototype your ideas using the wide range of Arduino shields
- No Arduino controller onboard, Flyport is the core of the system
- Compatible with open-PICUS Free IDE
- USB to Serial FTDI chip for firmware download
- Webserver, email client, SNTP, SMTP, TPC/UDP socket
- USB or 7-15V power supply
- #14 Digital I/O
- #6 Analog Inputs
- #9 PWM
- 110X54 mm

Block diagram

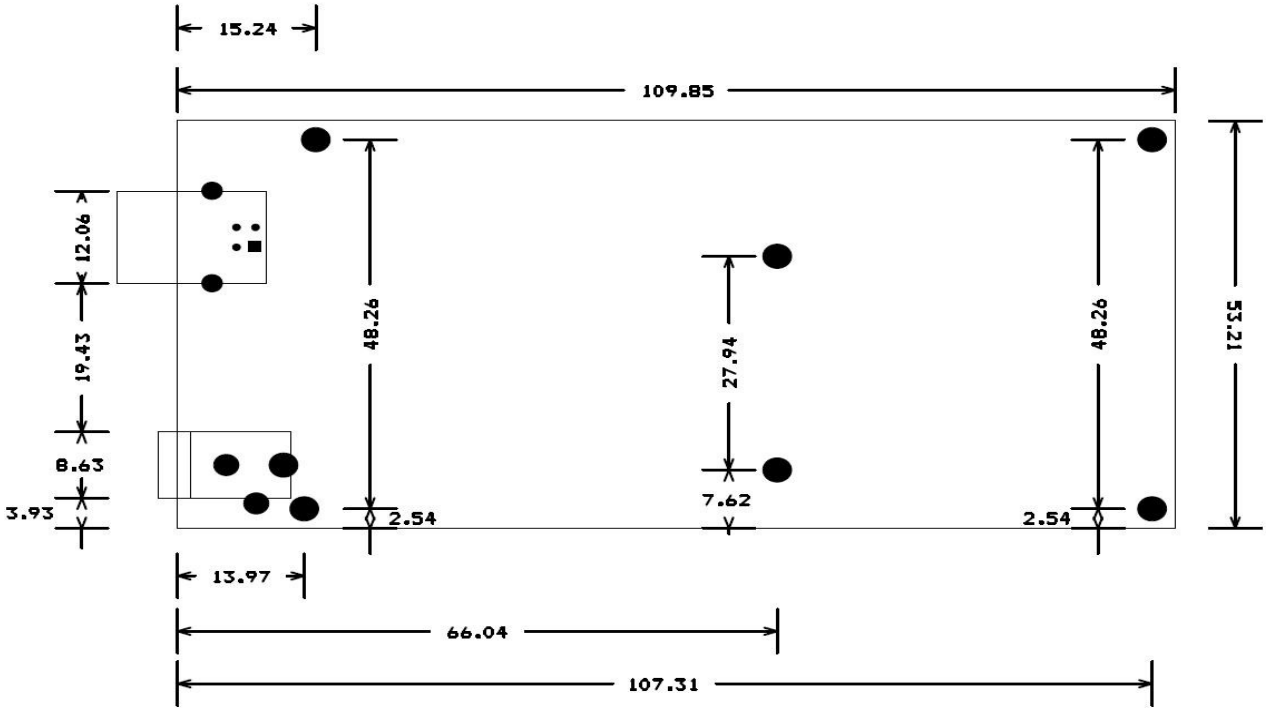


Digital Connectors (J3 and J1): pins with ~ symbol means those pins are also PWM.
Analog inputs measure range 0-3.3V (max input voltage 5V)

The USB port can be used to power the system and to download the firmware to the openPICUS module (there's the serial bootloader on each module)

If you prefer to use Microchip programmer you can use the PGM connector J6

Dimensions in mm



Power J4

Pin	Name	Arduino shield pin	Note
1	Reset	Input signal RESET (active low)	
2	3,3V	3.3V output	
3	5V	5V output	
4	GND	Ground	
5	GND	Ground	
6	Vin	Power supply	Range 7-15V DC

Analog J5

Pin	Name	Arduino shield pin	Connected to Flyport pin
1	A0	Analog input (0-3.3V measure) max 5V	pin 23
2	A1	Analog input (0-3.3V measure) max 5V	pin 25
3	A2	Analog input (0-3.3V measure) max 5V	pin 18
4	A3	Analog input (0-3.3V measure) max 5V	pin 20
5	A4	Analog input (0-3.3V measure) max 5V	pin 19
6	A5	Analog input (0-3.3V measure) max 5V	pin 21

DIGITAL (~PWM) J3

Pin	Name	Arduino shield pin	Connected to Flyport pin
1	RX<-0	D0 / UART RX INPUT	pin 13
2	TX->1	D1 / UART TX OUTPUT	pin 15
3	2	D2	pin 10
4	3	D3	pin 12
5	4	D4	pin 14
6	~5	D5	pin 5
7	~6	D6	pin 9
8	7	D7	pin 11
9	8	D8	pin 7
10	~9	D9	pin 4
11	~10	D10	pin 6
12	11	D11	pin 17
13	12	D12	pin 2
14	12	D13	pin 8
15	GND	Ground	-
16	NC	Not connected	-

Applications development

Please visit openPICUS project website **www.openpicus.com** to download the IDE, a getting started guide and some apps examples and libraries.

You need only a PC (windows) with a USB port for power supply and firmware download.

You don't need any expansive programming tool: on openPICUS modules is present a Serial boot-loader.

NOTE: Libraries or code for Arduino Shields may be not available. Please check on www.openpicus.com website or get ready to make library porting from Arduino platform to openPICUS standard.

Schematic of this board is available on our website

ORDERING INFORMATION

openPICUS to Arduino shield socket

Product Code 015370

No cables or power supply are included. Only the board

Note: the product is not provided with any openPICUS module, please buy modules separately.

Buy online on our website **www.eikonsite.it** or contact your local reseller.

Eikon srl
Via Giacomo Peroni 442
00131 Roma (RM) Italy
Vat IT02036680417

tel +39 06 92916378 fax +39 0721 054588
web www.eikonsite.it wmail info@eikonsite.it

Local reseller