

# Introduction



## The Maker Board to Rule Them All!

FEZ (fast and easy) is our magnificent maker board. This low cost board offers Arduino pinout compatibility, optional Wi-Fi for IOT applications, and can be programmed using multiple programming languages and development environments.

Pricing, purchasing and other information can be found on the [FEZ page](#) on our main website.

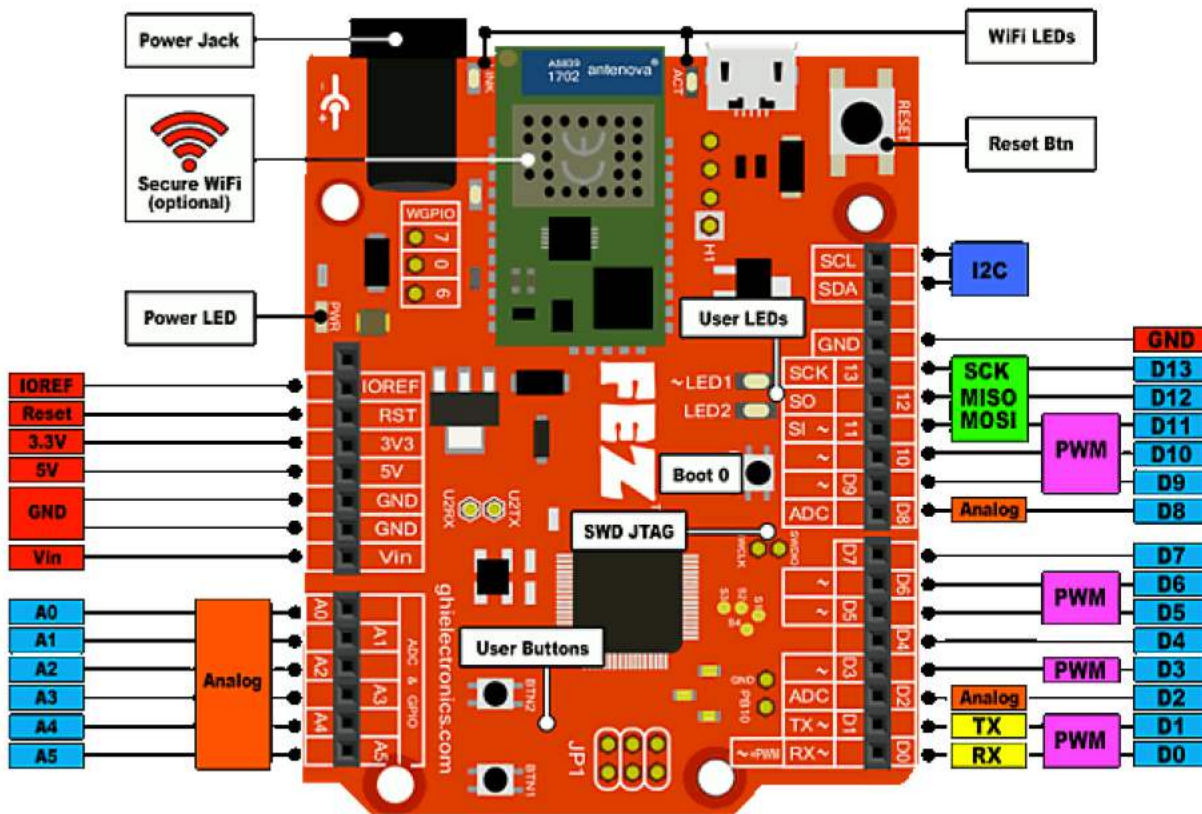
## Specifications

Spec	Value
Processor	STMicroelectronics ST32F401RET6
Speed	84 MHz
Internal RAM	96 KByte
Internal Flash	512 KByte
Dimensions	70.6 x 56.0 x 14.5 mm

# Peripherals\*

Peripheral	Quantity
GPIO (5V tolerant)	22
IRQ	22
UART	1
I2C	1
SPI	1
PWM	8
12 Bit ADC	8
CAN	0
USB Client	1
Wi-Fi	Optional

\*Note: Many peripherals share I/O pins. Not all peripherals will be available to your application.



# Resources

- [Schematic](#)
- [TinyCLR Tutorials](#)
- [Instructions](#) for updating the Wi-Fi module firmware.

## Programming Options

### TinyCLR

Embedded programming using Visual Studio .NET. [Learn more...](#)



### Arduino

Very popular open source standard. [Learn more...](#)



### Mbed

Free online C/C++ compiler. [Learn more...](#)



### MicroPython

A version of Python for microcontrollers. [Learn more...](#)



### Bare Metal

Use the Cortex-M4 compiler of your choice. [Learn more...](#)

### Shields

Selected to help get you started. [Learn more...](#)

```
C:\Users\GPH\Desktop\3dTest.c - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins W
3dTest.c
1 for (EyeZ=0; EyeZ<1800000; EyeZ=EyeZ+Speed) {
2   for (int index=0; index<1200; index=index+
3     int z1 = Lines[index*2]-EyeZ;
4     float ZRatio = (float)EyeDistance/(flo
5     int x1 = ((float)Lines[index]-((float)E
6     int y1 = 31.0-((float)Lines[index+1]-{
7
8     int z2 = Lines[index*2]-EyeZ;
9     ZRatio = (float)EyeDistance/(float)z2;
```

