

**DfRduino mega2560 V3(compatible with arduino mega 2560 )**

|                             |  |
|-----------------------------|--|
| Microcontroller             | ATmega2560                             |
| Operating Voltage           | 5V                                     |
| Input Voltage (recommended) | 7V - 12V                               |
| Input Voltage(range)        | 6V - 20V                               |
| Digital I/O Pins            | 54 (of which 15 provide PWM output)    |
| Analog Input Pins           | 16 I/O                                 |
| DC Current per I/O Pin      | 50 mA                                  |
| DC Current for 3.3V Pin     | 50 mA                                  |
| Flash Memory                | 256 KB of which 4KB used by bootloader |
| SRAM                        | 8 KB                                   |

EEPROM

4 KB

Clock Speed

16M Hz

**Pixy CUMcam5**

Processor

NXP LPC4330, 204MHz, dual-core

Image Sensor

Omnivision OV9715, 1/4", 1280x800

Image Sensor:

75 degrees horizontal, 47 degrees vertical

Lens Type

standard M12 (several different types available)

Power Consumption

140 mA

Power Input

USB Input (5V) or unregulated input (6V to 10V)

RAM

264 K bytes

Flash

1M bytes

Available Data Outputs

UART serial, SPI, I2C, USB, digital, analog

Size

2.1" x 1.75" x 1.4"

### Digital Button Module

Keycap Color

Red, Green, Blue

Supply Voltage

3.3V - 5V

Data type

Digital

Size

22 mm x 30 mm

### LED Module

Color

Red, Green, Blue

Brightness

2500 mcd to 3300 mcd Highlight output

Voltage

3.3V - 5V

|            |                 |
|------------|-----------------|
| Wavelength | 520 nm - 530 nm |
| Angle      | 80°- 110°       |
| Size       | 30 mm x 20 mm   |
| Weight     | 5 g             |

### JoyStick

|                    |                       |
|--------------------|-----------------------|
| Power Requirements | +3.3 - 5V             |
| Interface Mode     | PH2.0-3               |
| Analog output      | 2 axes (X, Y)         |
| Number Key Output  | 1 (Z-Axis)            |
| Dimensions         | 37 mm x 25 mm x 32 mm |
| Weight             | 5 g                   |

**Voice Module (English)**

|  |  |
|--|--|
| Local Speech Recognition Working Voltage | 3.3 - 5V   |
| Working Current                          | 3.3V:25-26.5mA,80mA@playing;5V:25-26.5mA,130mA@playing                         |
| Working Temperature                      | 0-85 °C  |
| Identification Items                     | 22   |
| Built-in microphone                      | omnidirectional, SNR: 55d, sensitivity min = -43dB, typical = -40, max = -37dB |
| Size                                     | 40 * 20 mm   |
| Weight                                   | 5 g  |