oribokit®

ORIGAMI & ROBOTICS KIT

VERSION 1.4
RGB FLOWER
ATMEGA32U4

EXP 1
2.54mm 6 pin header

TX	TX Serial
RX	RX Serial
5V	5V
G	Ground
SDA	I2C Serial Data
SCL	I2C Serial Clock

EXP 2
2.54mm 6 pin header

INT	Interrupt
A5	Analog Pin 5
A4	Analog Pin 4
A3	Analog Pin 3
A2	Analog Pin 2
A1	Analog Pin 1

RGB [1 - 3]
2.54mm 3 pin header

GND	Ground	
5V	5V DIGITAL	
DATA	RGB1, RGB2, RGB3	
RGB1	PWM PB6	Pin 10
RGB2	PWM PC6	Pin 5
RGB3	PWM PC7	Pin 13

SERVO [1 - 3]
2.54mm 3 pin header

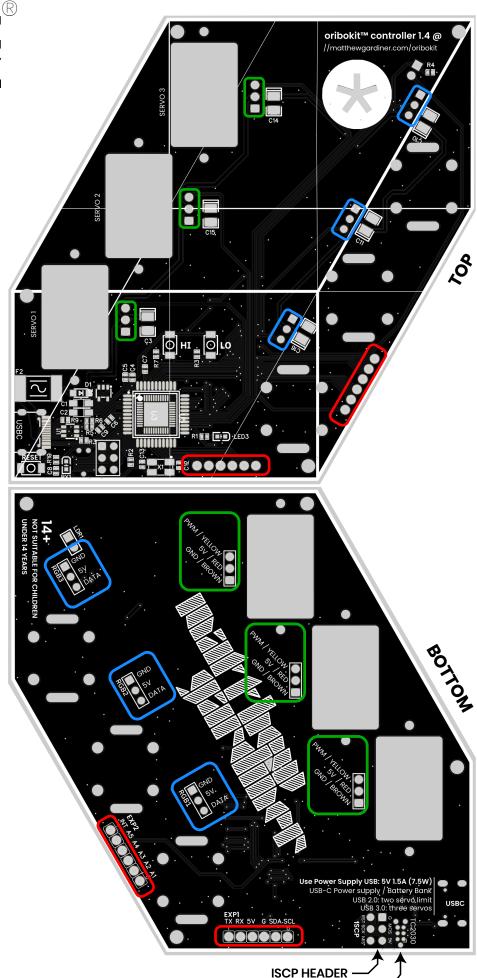|		
GND	Ground	
5V	5V DIGITAL	
RGB1	PWM PB5	Pin 9
RGB2	PWM PD7	Pin 6
RGB3	PWM PD6	Pin 12

FUSE RATED AT 1.5 A

REVISION NOTES:
ATMEGA32u4
Native USB
Added EXP 1 for Serial and I2C
Added EXP2 for Analogue Sensors
Added RGB 1–3 for PWM RGB LEDs

oribokit™ controller 1.4 @
//matthewgardiner.com/oribokit

SERVO 3

SERVO 2

SERVO 1

TOP

14+
NOT SUITABLE FOR CHILDREN
UNDER 14 YEARS

PWM / YELLOW
5V / RED
GND / BROWN

PWM / YELLOW
5V / RED
GND / BROWN

PWM / YELLOW
5V / RED
GND / BROWN

RGB3 GND 5V DATA

RGB2 GND 5V DATA

RGB1 GND 5V DATA

BOTTOM

EXP2
INT A5 A4 A3 A2 A1

Use Power Supply USB: 5V 1.5A (7.5W)
USB-C Power supply / Battery Bank
USB 2.0: two servo limit
USB 3.0: three servos

USBC

EXP1
TX RX 5V G SDA SCL

ISCP
RST SCK MISO
G MOSI 5V

TC2030

ISCP HEADER
TAG CONNECT