

oribokit™

Origami & Robotics kit

VERSION 1.0
COLLECTORS EDITION

STM32F103C8

EXPOSED PINS & FUNCTIONS

A6	PWM (3V), ADC/ANALOG
A7	PWM (3V), ADC/ANALOG
B0	PWM (3V), ADC/ANALOG
B1	PWM (3V), ADC/ANALOG
B3	DIGITAL (5V)
B6	PWM (5V), DIGITAL
B7	PWM (5V), DIGITAL
B8	PWM (5V), DIGITAL
B9	PWM (5V), DIGITAL

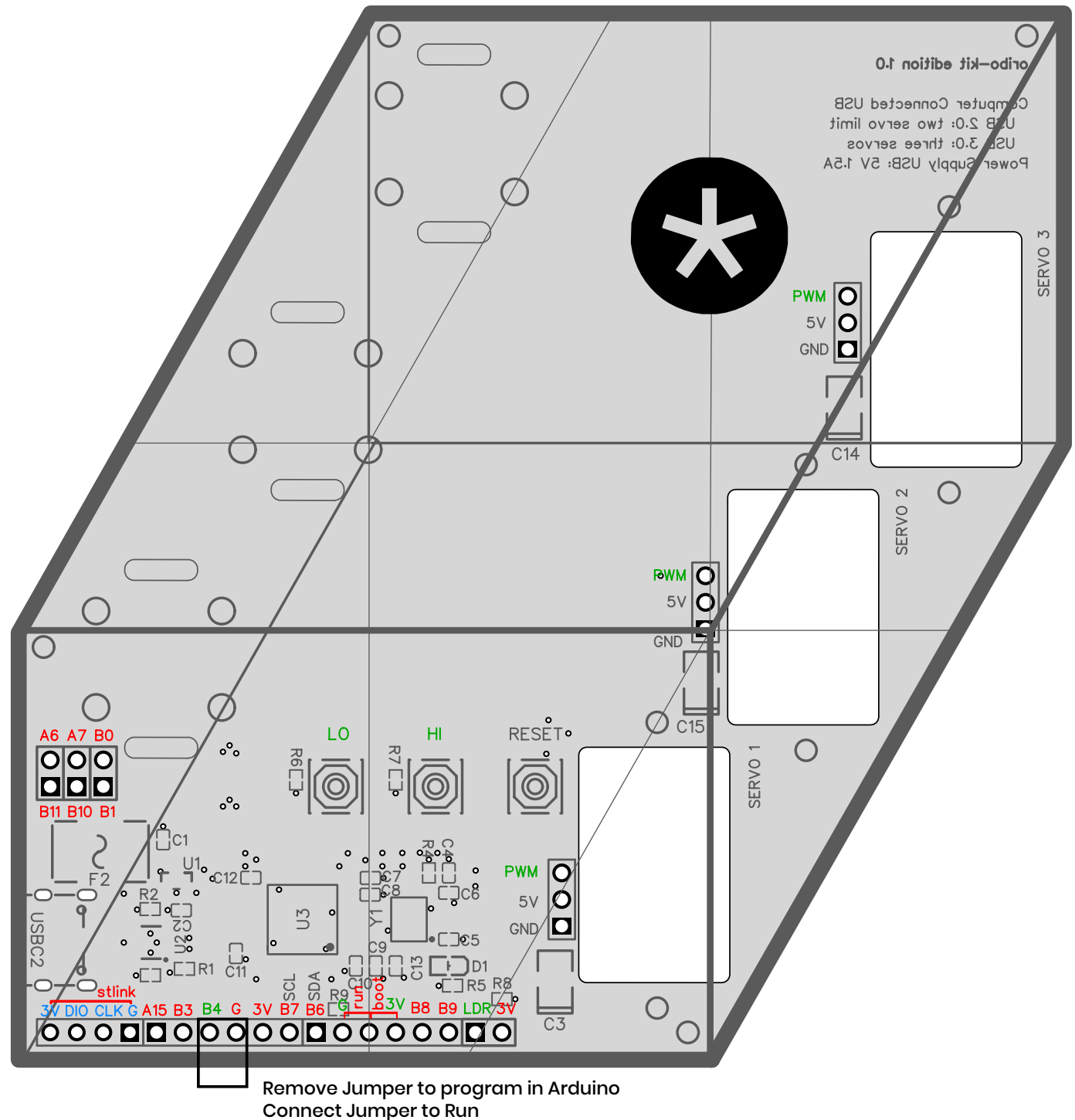
USED PINS

B4	> RUN MODE (SEE JUMPER NOTE)
HI	> B10 (5V DIGITAL)
LO	> B11 (5V DIGITAL)
SERVO1	> A10 (5V PWM & DIGITAL)
SERVO2	> A9 (5V PWM & DIGITAL)
SERVO3	> A8 (5V PWM & DIGITAL)
LDR	> A5 (3V ADC ANALOG)

STLINK

SWDIO	> A13
CLK	> A14
3V	
GND	

FUSE RATED AT 1.5 A



oribokit™

Origami & Robotics kit

VERSION 1.1
ARS ELECTRONICA EDITION

STM32F103C8

EXPOSED PINS & FUNCTIONS

B1	PWM (3V), ADC/ANALOG
B0	PWM (3V), ADC/ANALOG
A7	PWM (3V), ADC/ANALOG
A6	PWM (3V), ADC/ANALOG
B8	PWM (5V), DIGITAL
B7	PWM (5V), DIGITAL
B6	PWM (5V), DIGITAL
B4	DIGITAL (5V)
B3	DIGITAL (5V)

USED PINS

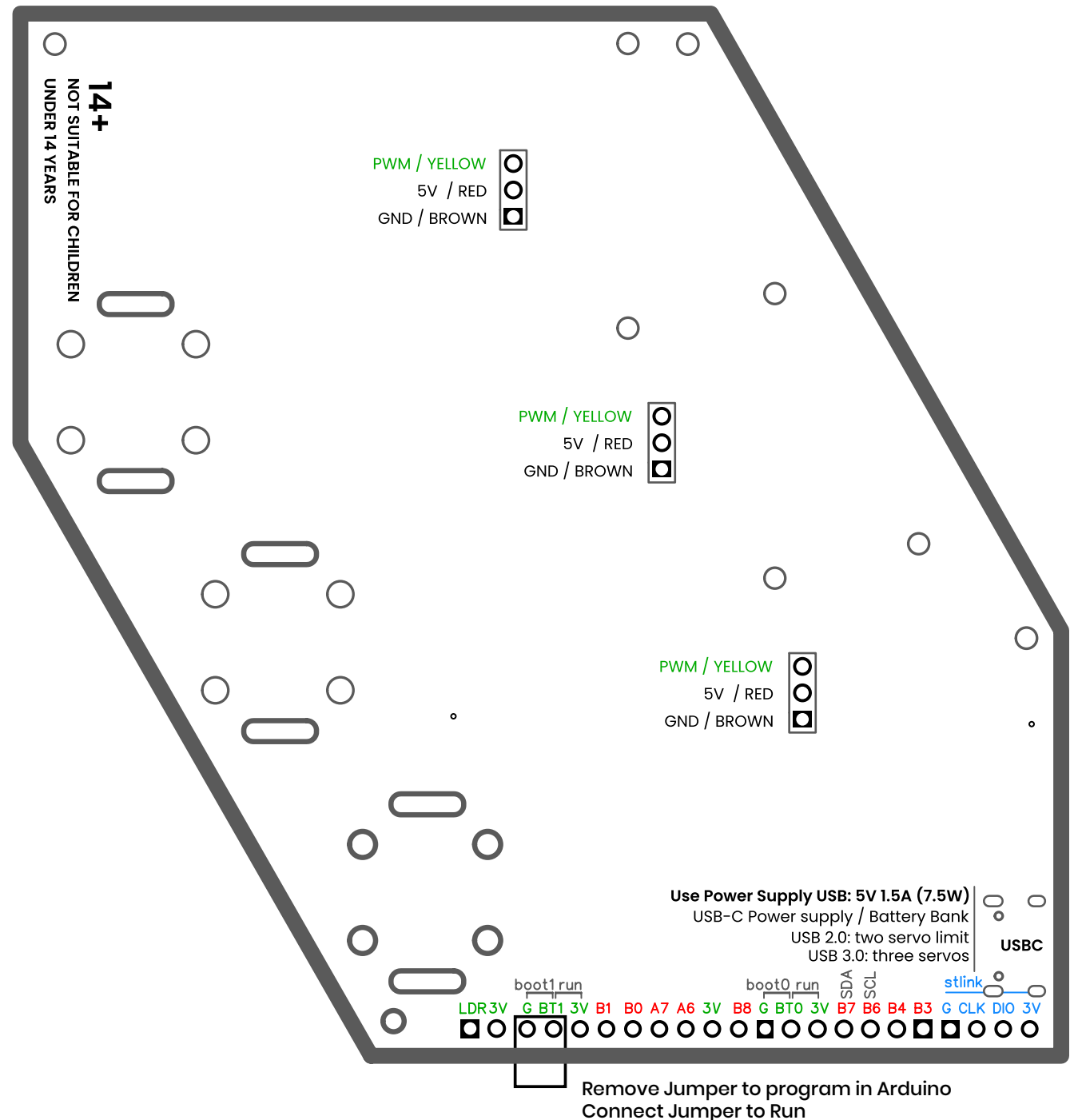
BOOT1	> RUN MODE (SEE JUMPER NOTE)
HI	> B10 (5V DIGITAL)
LO	> B11 (5V DIGITAL)
SERVO1	> A10 (5V PWM & DIGITAL)
SERVO2	> A9 (5V PWM & DIGITAL)
SERVO3	> A8 (5V PWM & DIGITAL)
LDR	> A5 (3V ADC ANALOG)

STLINK

SWDIO	> A13
CLK	> A14
3V	
GND	

FUSE RATED AT 1.5 A

BOTTOM OF BOARD



oribokit[®]

ORIGAMI & ROBOTICS KIT

VERSION 1.4

RGB FLOWER

ATMEGA32U4

EXP1

2.54mm 6 pin header

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

EXP2

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:

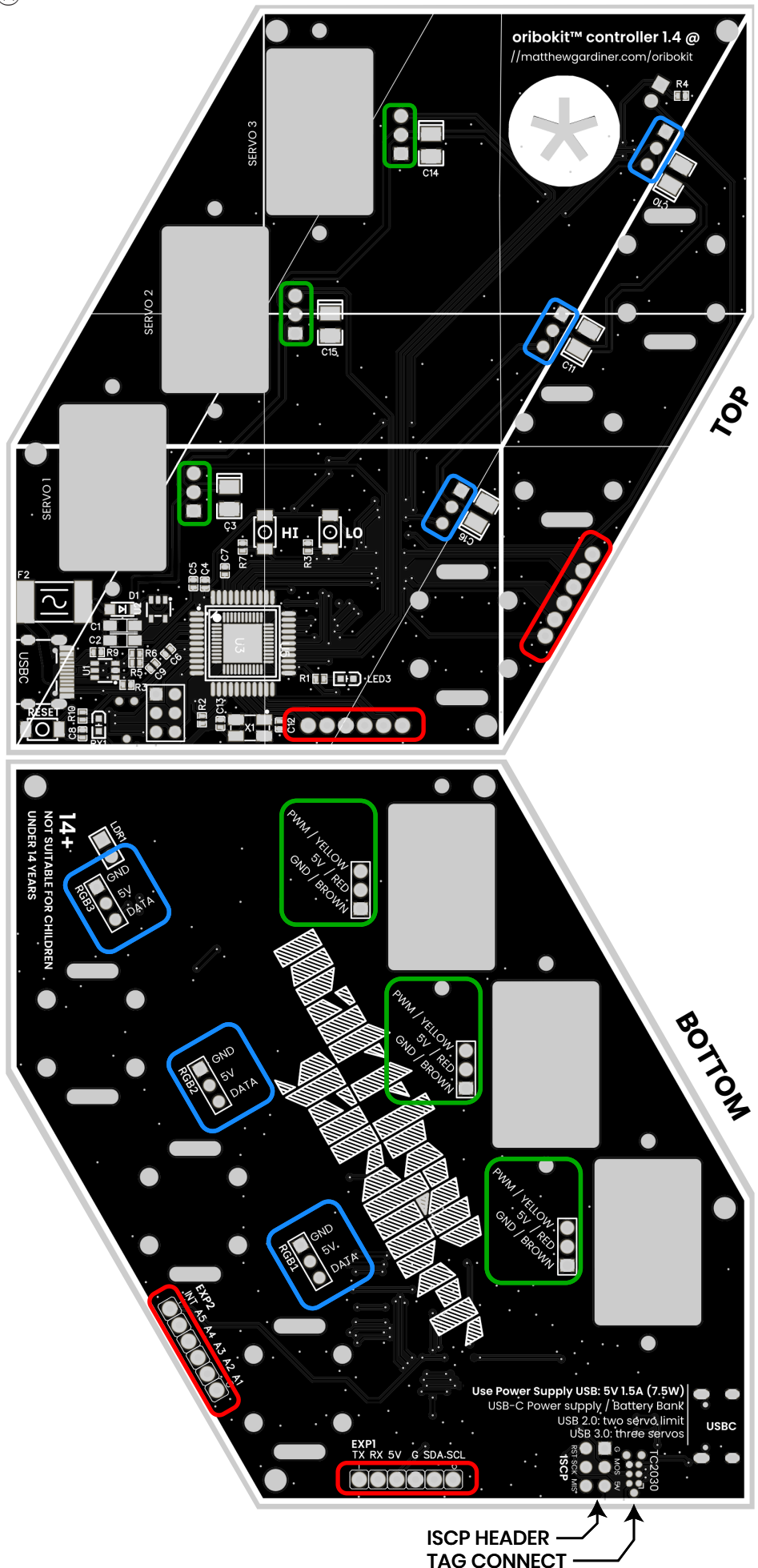
ATMEGA32u4

Native USB

Added EXP1 for Serial and I2C

Added EXP2 for Analogue Sensors

Added RGB 1-3 for PWM RGB LEDs



oribokit[®]
ORIGAMI & ROBOTICS KIT

VERSION 1.5

RGB FLOWER 2

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:

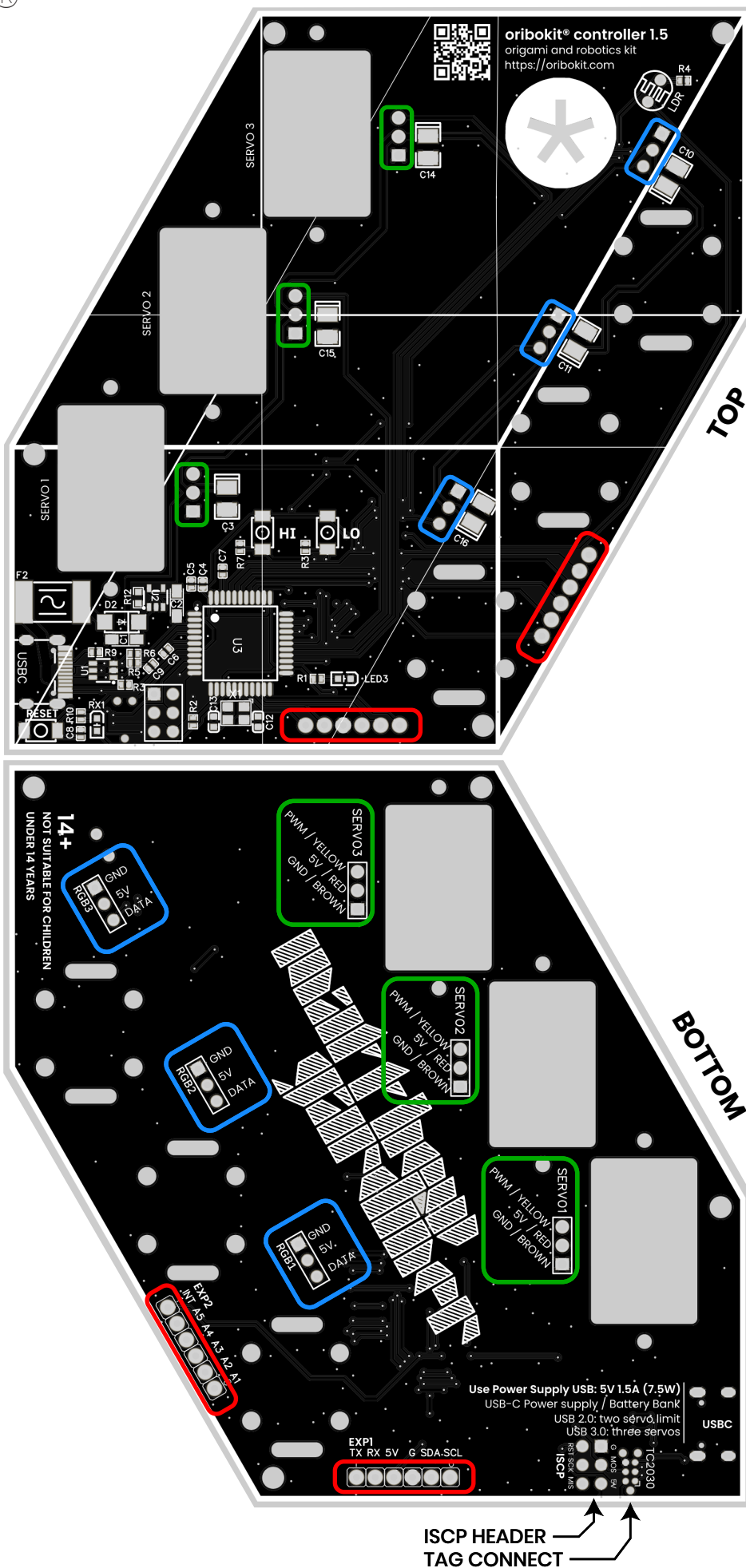
ATMEGA32u4

Added QR-CODE to oribokit.com

Chipaggeon necessitated updates

Updated 16MhZ crystal

Updated Power Diode D2



ISCP HEADER — TAG CONNECT

oribokit[®]

ORIGAMI & ROBOTICS KIT

VERSION 1.6

FLAT FLEX

ATMEGA32U4

EXP1

2.54mm 6 pin header

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

EXP2

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

FPC [1-3]

0.5mm Flat Flex Cable

GND Ground
5V 5V DIGITAL
RGB OUT Not connected
RGB IN RGB1 RGB2 RGB3
A4 Analog Pin 4
A3 Analog Pin 3
A2 Analog Pin 2
A1 Analog Pin 1

FUSE RATED AT 1.5 A

REVISION NOTES:

ATMEGA32u4
 Added Flat Flex connectors
 Updated USB-C connector

