3DoT v9 Detail Block Diagram

ATmega32U4 Microcontroller

Motors

TB6612FNG Dual Motor Driver

MOTOR A

MOTOR B

SERVO 1

SERVO 2

3DoT Sensor Header J3

3DoT Header J2

3DoT Header J1

HM-11 Bluetooth v4.0 BLE Transceiver

Power Conditioning

Reverse Battery Protection Circuit

TPS61230 2.1A 5v Buck Converter

Programmable Current Limiting Circuit

TLV755P 3.3V 500mA LDO

Battery Level Sensor Circuit

MCP73831 Battery Charger

RCR123A 3.6V 650mAh Rechargeable Li-Ion Battery

Power Switch

USB A/B

VBus

IN

OUT

3.3V

SDA

SCL

RESET

IN

OUT

3.3V

GND

SIGNAL

V+ 1

V- 2

GND 3

TIPS61230 2.1A 5V Buck Converter

Note: Pin mapping C:\Program Files (x86)\Arduino\hardware\arduino\variants\leonardo\pins_arduino.h

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Note: Pin mapping C:\Program Files (x86)\Arduino\hardware\arduino\variants\leonardo\pins_arduino.h