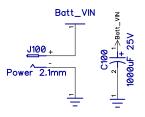
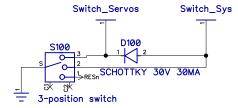
# System Power

#### DC Barrel Jack

DO NOT EXCEED Servo voltage rating or 9V supply voltage, whichever is lower

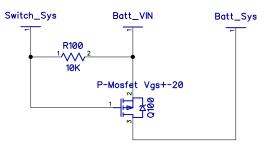


#### Power Switch

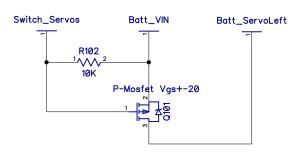


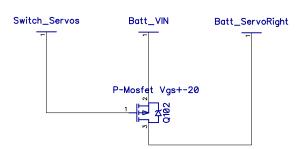
Position 1 is "OFF". This holds FLiP reset to GND, to disable FLiP whilst switch is OFF (FLiP might be USB powered!)
NOTE! WiFi will still be powered by FLiP USB (if connected), allowing firmware updates

#### Mosfet controlled power on/off

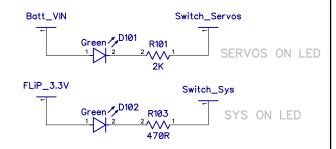


## Mosfet controlled servo power on/off





#### Power status LEDs



Parallax Inc. 599 Menlo Drive Rocklin, CA 95765

(916) 624-8333 http://www.parallax.com/

## SumoBot FLiP WX

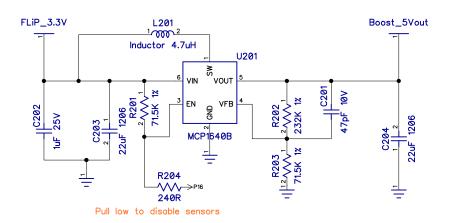
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Part Number: 32132

Revision: A

# 5V Regulator

### 5V 300mA Boost Regulator



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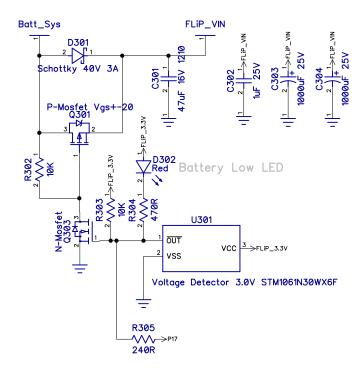
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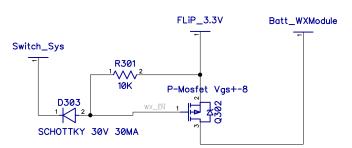
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# **Supporting Power Circuits**

#### Low Battery Management



#### WX WiFi Power Management



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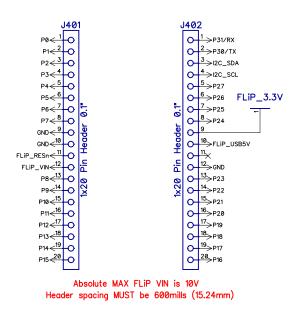
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Part Number: 32132

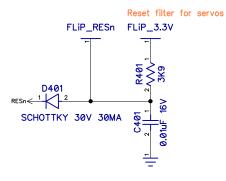
Revision: A

## FLiP Socket and Circuits

#### FLiP Socket



### Reset Switch and interfacing



Allow 4-press AP function

D402

RESn
2 wx\_crc

SCHOTTKY 30V 30MA

## Buzzer



### WX Debug output

Tactile 6mm

R402 wx\_DBG<-∕√√→>P18 240R

WX\_DBG is DIO8/DTR when XBEE module installed

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## SumoBot FLiP WX

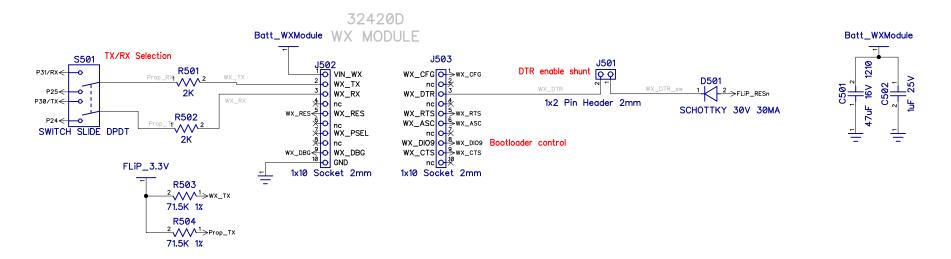
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## WiFi Socket

### Parallax WiFi Module (also compatible with XBee)



DTR header allows couple things....

Before battle, user could remove the header to ensure no odd resets of the bot if wifi drops during battle
User could remove the shunt and place a jumper wire from CTS to RESn (If they prefer that channel for resets)
Also a handy breakout for RESn

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## SumoBot FLiP WX

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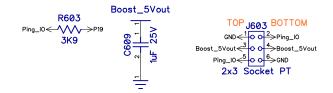
Revision: A

# Servo and accessory headers

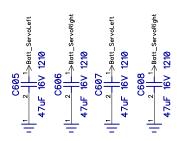
#### FLiP controlled IO headers at BattV, for SERVOs



#### PING header



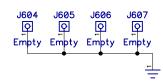
#### SERVO header bulk capacitance



## Memsic 2125 header (Unpopulated)



#### Mounting holes - GND



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## SumoBot FLiP WX

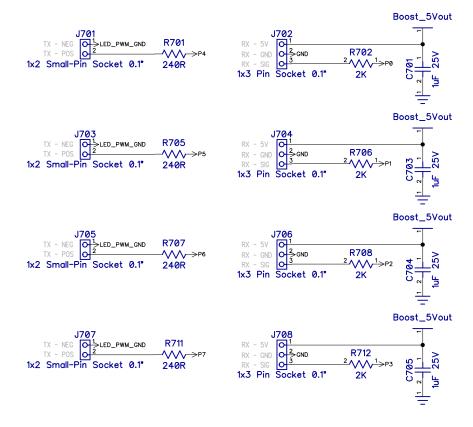
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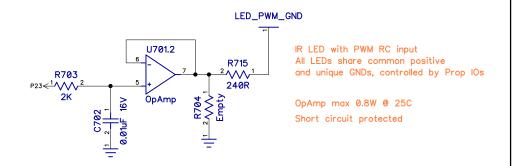
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## IR Headers and Status LEDs

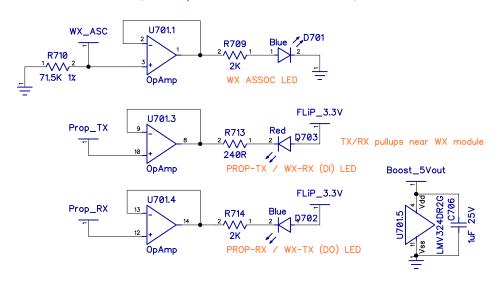
#### IR TX/RX Headers



#### IR LED PWM Driver



### Status LEDs (use spare buffered drivers)



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## SumoBot FLiP WX

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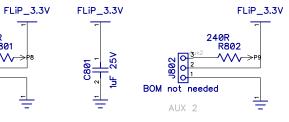
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## **AUX and QTI Headers**

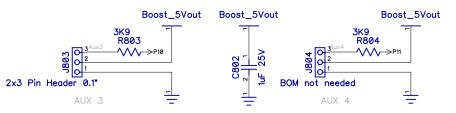
#### **AUX Headers**

240R R801

FLiP controlled IO headers at 3.3V



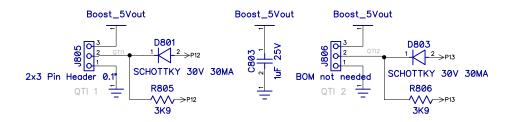
FLiP controlled IO headers at 5V

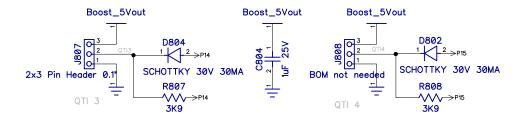


#### QTI Headers

2x3 Pin Header 0.1

AUX :





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