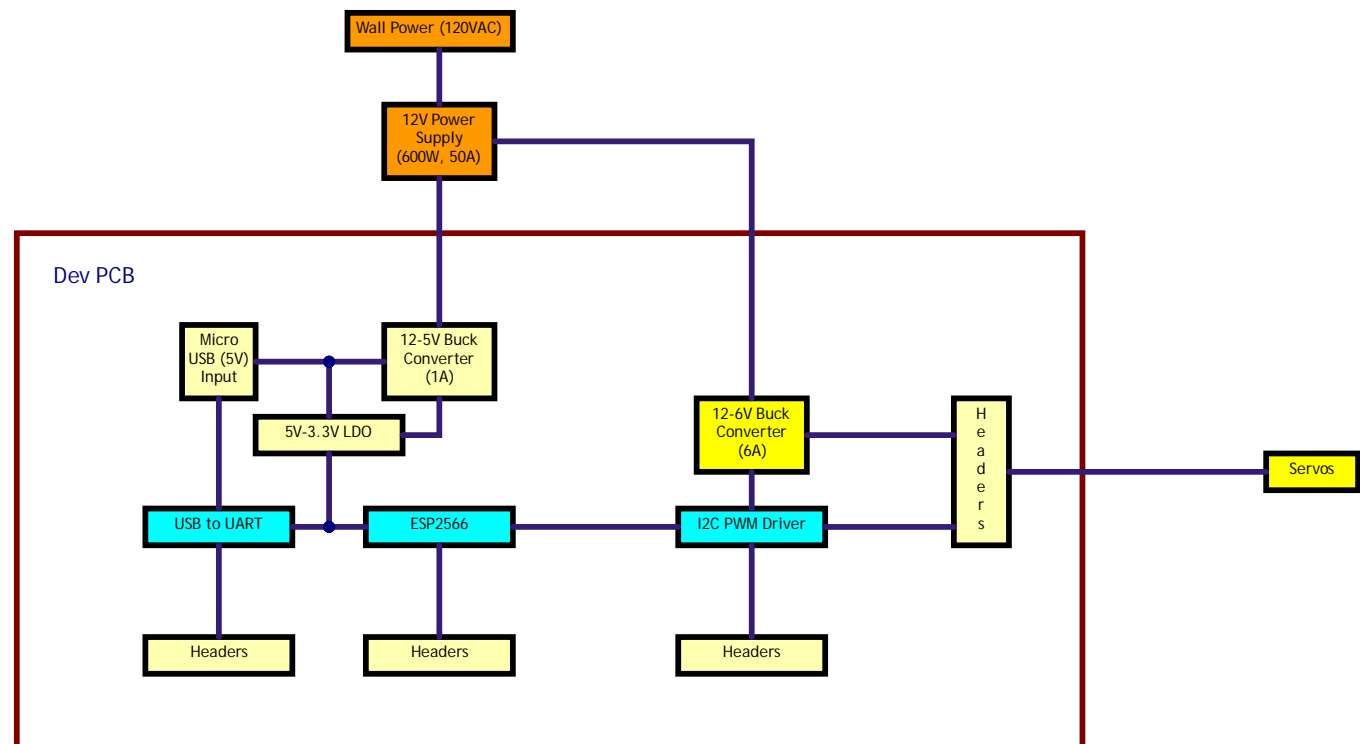




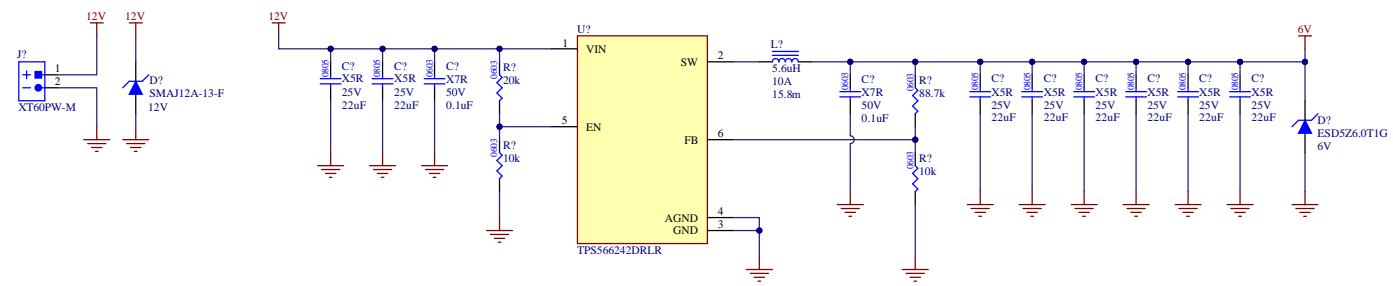
Block Diagram



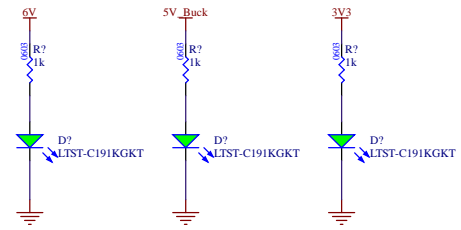
| | | | | | |
|--|--|---|--|---|--|
|  PUTTPILOT | | PuttPilot 200 University Ave W Waterloo, Ontario, Canada N2L 3G1 | |  | |
| PROJECT PuttPilot-Dev.PrjPcb, [No Variations] | | | | REVISION 1.0 | |
| DOCUMENT Block-Diagram.SchDoc | | | | MODIFIED 2024-10-14 | |
| ENGINEER Ethan Abraham | | REVIEWER * | | SHEET 1 OF 5 | |

Power

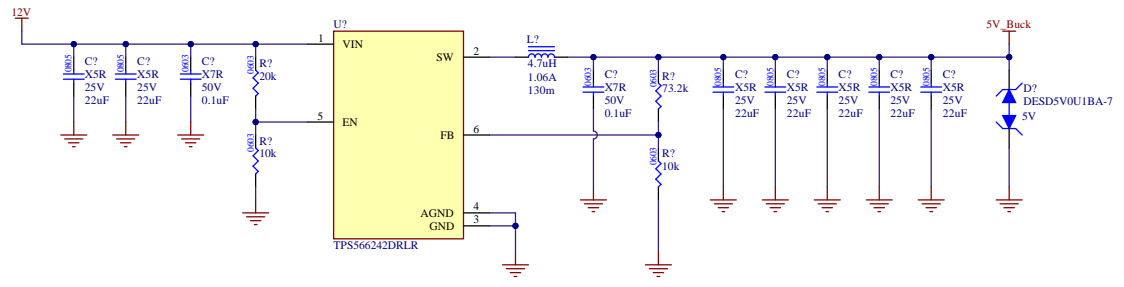
12-6V Buck (Servo Power), 3x



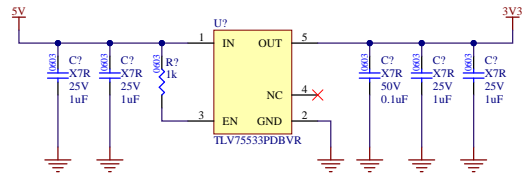
Power Rail LEDs



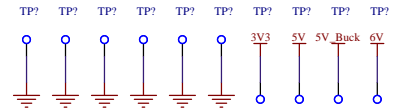
12-5V Buck (ESP Power)




5V-3V3 LDO



Testpoints

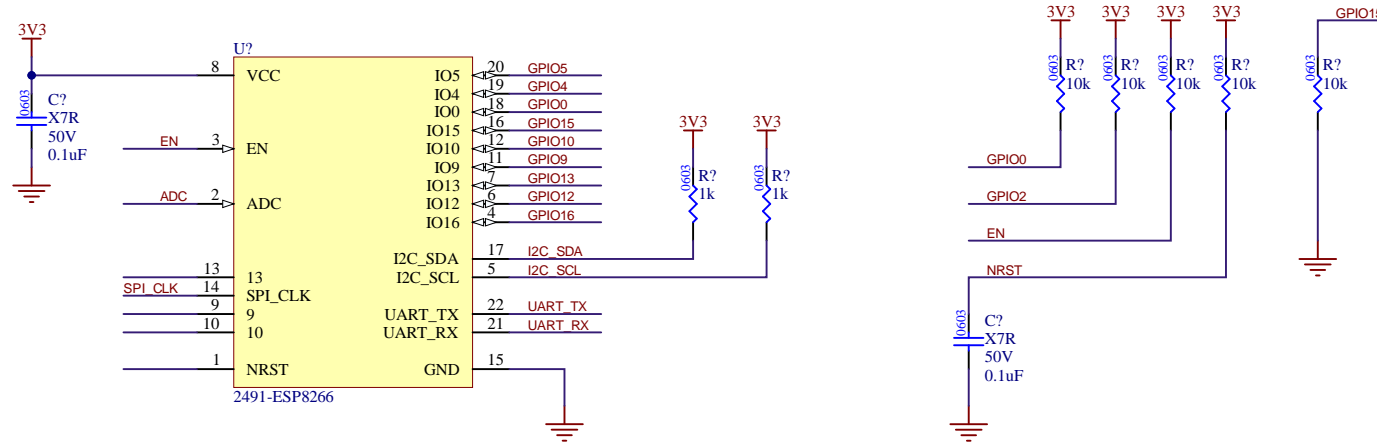






PUTTPILOT
PuttPilot
200 University Ave W
Waterloo, Ontario, Canada
N2L 3G1

| | | |
|--|---------------|------------------------|
| PROJECT PuttPilot-Dev.PrjPcb, [No Variations] | | REVISION 1.0 |
| DOCUMENT Power.SchDoc | | MODIFIED 2024-10-14 |
| ENGINEER Ethan Abraham | REVIEWER * | SHEET 2 OF 5 |

ESP8266

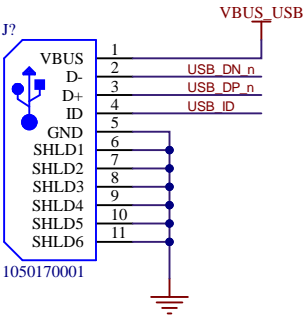


Headers

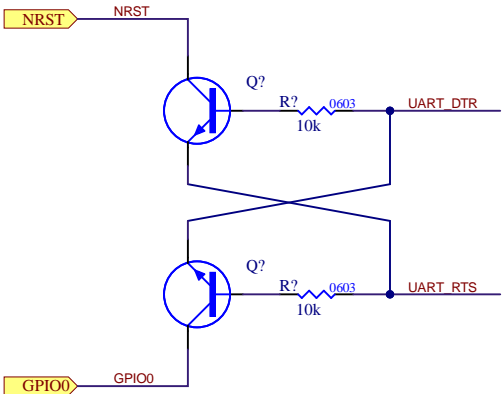
| | | | |
|--|---------------|---|---|
|  PUTTPILOT | | PuttPilot 200 University Ave W Waterloo, Ontario, Canada N2L 3G1 |  |
| PROJECT PuttPilot-Dev.PrjPcb, [No Variations] | | REVISION 1.0 | |
| DOCUMENT ESP8266.SchDoc | | MODIFIED 2024-10-14 | |
| ENGINEER Ethan Abraham | REVIEWER * | SHEET 3 OF 5 | |

USB to UART

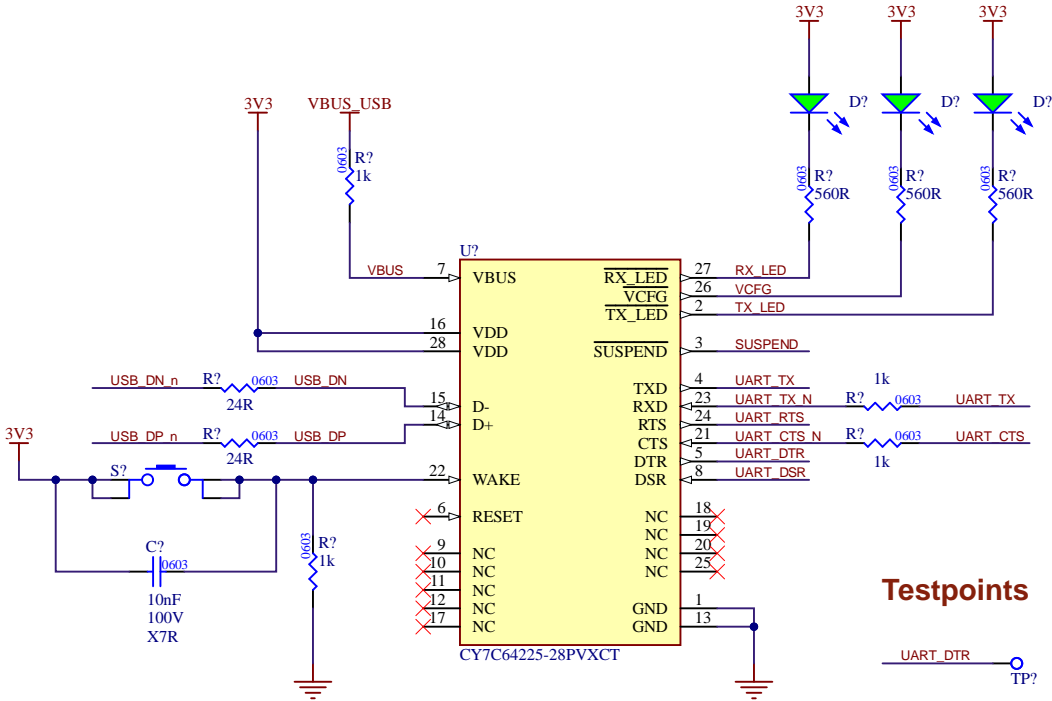
Micro USB B



Auto Program Circuit

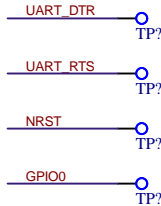


| AUTO PROGRAM CIRCUIT | | | | |
|----------------------|-----|-----|-------|--|
| DTR | RTS | RST | GPIO0 | |
| 1 | 1 | 1 | 1 | |
| 0 | 0 | 1 | 1 | |
| 1 | 0 | 0 | 1 | |
| 0 | 1 | 1 | 0 | |



Note from Manufacturer: Leave RESET as NO CONNECT

Testpoints



PUTTPILOT

PuttPilot
200 University Ave W
Waterloo, Ontario, Canada
N2L 3G1



PROJECT
PuttPilot-Dev.PrjPcb, [No Variations]

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DOCUMENT
USB_TO_UART.SchDoc

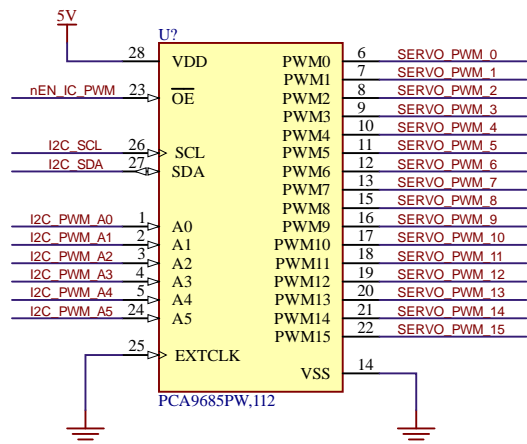
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2024-10-14

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Ethan Abraham

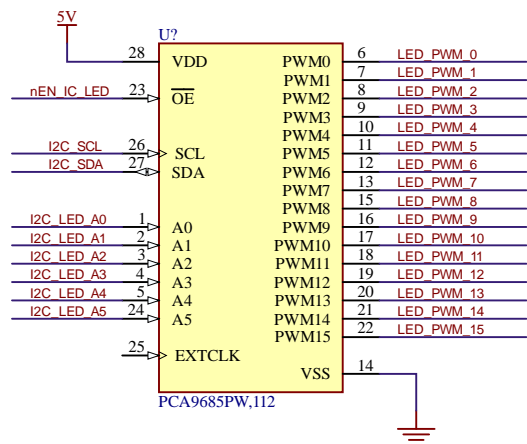
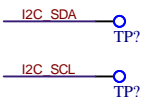
REVIEWER
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SHEET 4 OF 5

PWM Control



Testpoints



| | | | |
|---|---------------|---|---|
|  | | PuttPilot 200 University Ave W Waterloo, Ontario, Canada N2L 3G1 |  |
| PROJECT PuttPilot-Dev.PrjPcb, [No Variations] | | REVISION 1.0 | |
| DOCUMENT PWM_CONTROL.SchDoc | | MODIFIED 2024-10-14 | |
| ENGINEER Ethan Abraham | REVIEWER * | SHEET 5 OF 5 | |

| Comment | Description | Designator | Footprint | LibRef | Quantity |
|------------------------|---------------------------------------|------------|--------------------|------------------------|----------|
| GCJ188R71H104KA12 D | CAP CER 0.1uF 50V X7R 0603 | C? | .CAP_0603 | GCJ188R71H104KA12 D | 7 |
| GOM188R72A103KA37 D | CAP CER 0.01uF 100V X7R | C? | .CAP_0603 | GOM188R72A103KA37 D | 1 |
| GRM21BR61E226ME44 K | CAP CER 22uF 25V X5R 0805 | C? | .CAP_0805 | GRM21BR61E226ME44 K | 15 |
| GRT188R71E105KE13D | CAP CER 1uF 25V X7R 0603 | C? | .CAP_0603 | GRT188R71E105KE13D | 4 |
| DESD5V0U1BA-7 | TVS DIODE 5WMM | D? | DESD5V0U1BA-7 | DESD5V0U1BA-7 | 1 |
| ESD5Z6.0T1G | TVS DIODE 6WMM | D? | ESD5Z6.0T1G | ESD5Z6.0T1G | 1 |
| LTST-C191KGKT | LED GREEN 2V 0603 | D? | .LED_0603 | LTST-C191KGKT | 6 |
| SMAJ12A-13-F | TVS DIODE 12WMM | D? | SMAJ12A-13-F | SMAJ12A-13-F | 1 |
| 1050170001 | CONN USB MICRO B R/A | J? | USB_MICRO_B | 1050170001 | 1 |
| XT60PW-M | XT60PW Male | J? | XT60PW-M | XT60PW-M | 1 |
| NRH3012T4R7MN | FIXED IND 4.7uH 1.06A | L? | | NRH3012T4R7MN | 1 |
| SRP6060FA-5R6M | FIXED IND 5.6uH 10A 15.8mOhm | L? | SRP6060FA-5R6M | SRP6060FA-5R6M | 1 |
| MMBT2222A-7-F | NPN BJT 40V 600mA SOT-23 | Q? | .SOT-23-3 | MMBT2222A-7-F | 2 |
| ERJ-3EKF2002V | RES 20K OHM 0603 | R? | .RES_0603 | ERJ-3EKF2002V | 2 |
| RC0603FR-071KL | RES 1K OHM 0603 | R? | .RES_0603 | RC0603FR-071KL | 10 |
| RC0603FR-0710KL | RES 10K OHM 0603 | R? | .RES_0603 | RC0603FR-0710KL | 11 |
| RC0603FR-0724RL | RES 24 OHM 0603 | R? | .RES_0603 | RC0603FR-0724RL | 2 |
| RC0603FR-0773K2L | RES 73.2K OHM 0603 | R? | | RC0603FR-0773K2L | 1 |
| RC0603FR-0788K7L | RES 88.7K OHM 0603 | R? | .RES_0603 | RC0603FR-0788K7L | 1 |
| RC0603FR-07560RL | RES 560 OHM 0603 | R? | .RES_0603 | RC0603FR-07560RL | 3 |
| PTS647SN38SMTR2LFS | SWITCH TACTILE SPST- NO 0.05A 12V | S? | PTS647SN38SMTR2LFS | PTS647SN38SMTR2LFS | 1 |
| RCVCTE | SMT Test Point | TP? | RCVCTE | RCVCTE | 16 |
| 2491-ESP8266 | ESP8266 + Trace Antenna, 4MB Flash | U? | | 2491-ESP8266 | 1 |
| CY7C64225-28PVXCT | USB to UART SOP 28 Pin | U? | CY7C64225-28PVXCT | CY7C64225-28PVXCT | 1 |
| PCA9685PW,112 | I2C LED Driver | U? | PCA9685PW,112 | PCA9685PW,112 | 2 |
| TLV75533PDBVR | 3V3 (Fixed) LDO 500mA SOT25 | U? | .SOT-23-5 | TLV75533PDBVR | 1 |
| TPS566242DRLR | BUCK 3V-16V 6A SOT- 563 | U? | TPS566242DRLR | TPS566242DRLR | 2 |