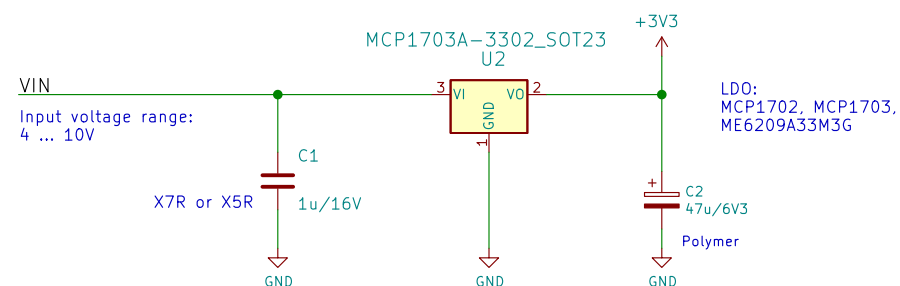
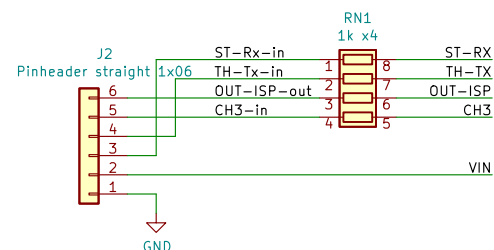


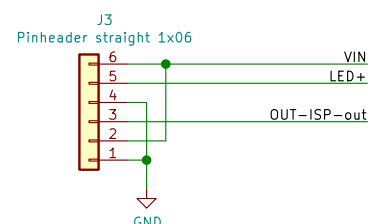
Voltage regulator



Servo/Pre-processor in/out



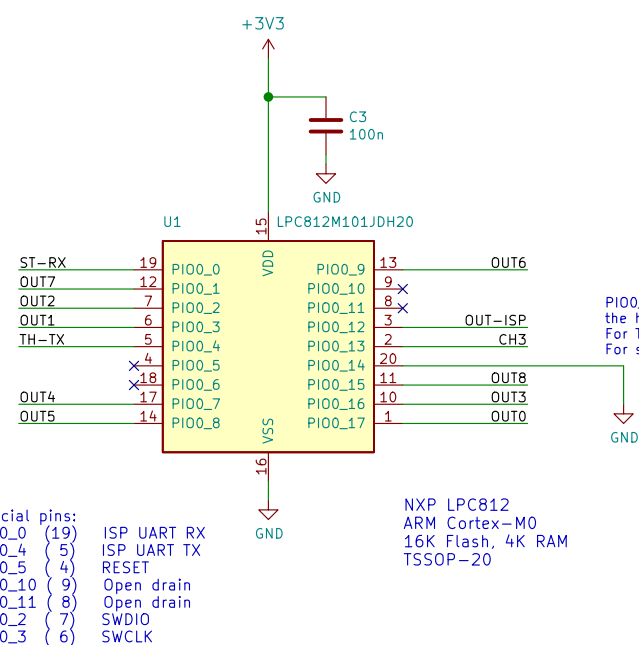
Output connector



VIN1 is physically close to LED+.
This allows two modes of operation:

- 1) when VIN1 is connected to LED+ via a jumper, then the LEDs are powered from the receiver.
- 2) A separate power supply can be connected to LED+ (and the nearby GND), e.g. for higher voltages

Microcontroller

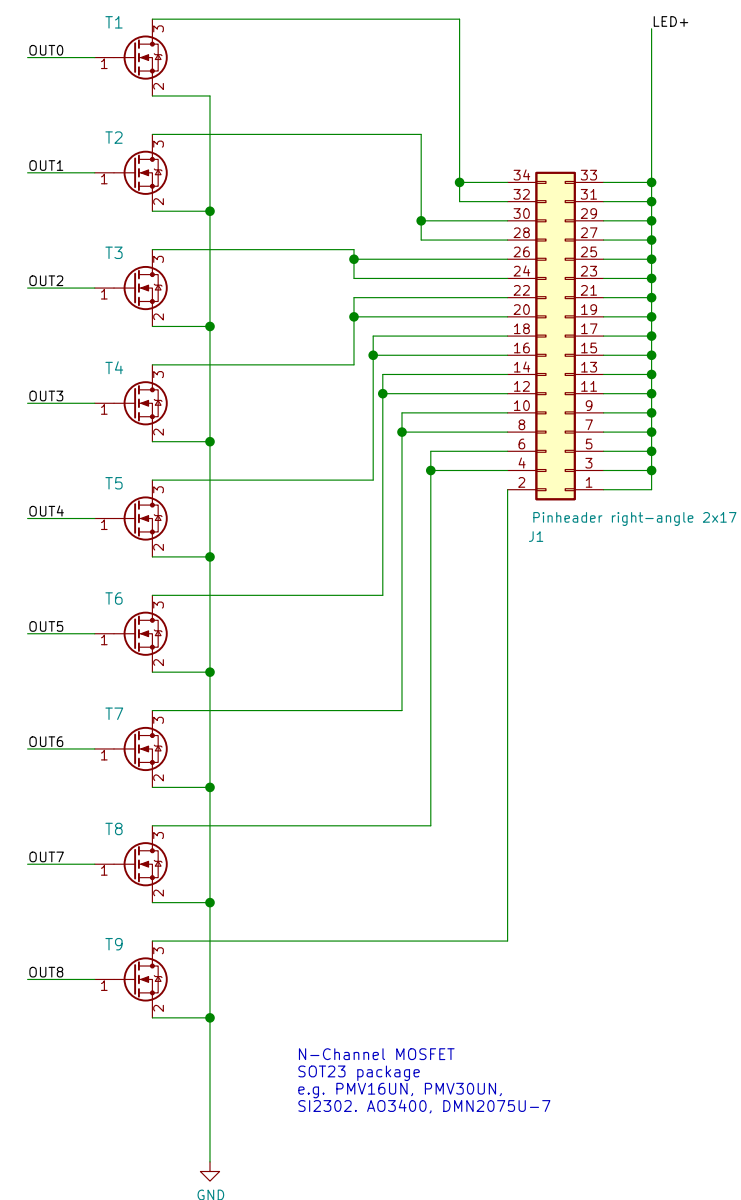


PI00_14 serves as detection whether the hardware has the TLC5940 or is the switching version. For TLC5940 it must be left floating (pull-up). For switching version it must be pulled to GND.

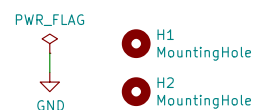
NXP LPC812
ARM Cortex-M0
16K Flash, 4K RAM
TSSOP-20

```
Special pins:
PIO0_0  (19)  ISP UART RX
PIO0_4  (5)   ISP UART TX
PIO0_5  (4)   RESET
PIO0_10 (9)   Open drain
PIO0_11 (8)   Open drain
PIO0_2  (7)   SWDIO
PIO0_3  (6)   SWCLK
```

LED driver and outputs



N-Channel MOSFET
SOT23 package
e.g. PMV16UN, PMV30UN,
SI2302, AO3400, DMN2075U-7



laneboysrc@gmail.com

LANE Boys RC

Sheet: /
File: rc-light-controller-switching-lpc812.sch

Title: DIY RC Light Controller Mk4 S

Size: A3	Date: 2020-06-14
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Size: A5	Date: 2020-08-14
KiCad E.D.A.	kiCad 5.1.6-c6e7f7d87ubuntu18.04.1

Rev: 1

Id: 1/1