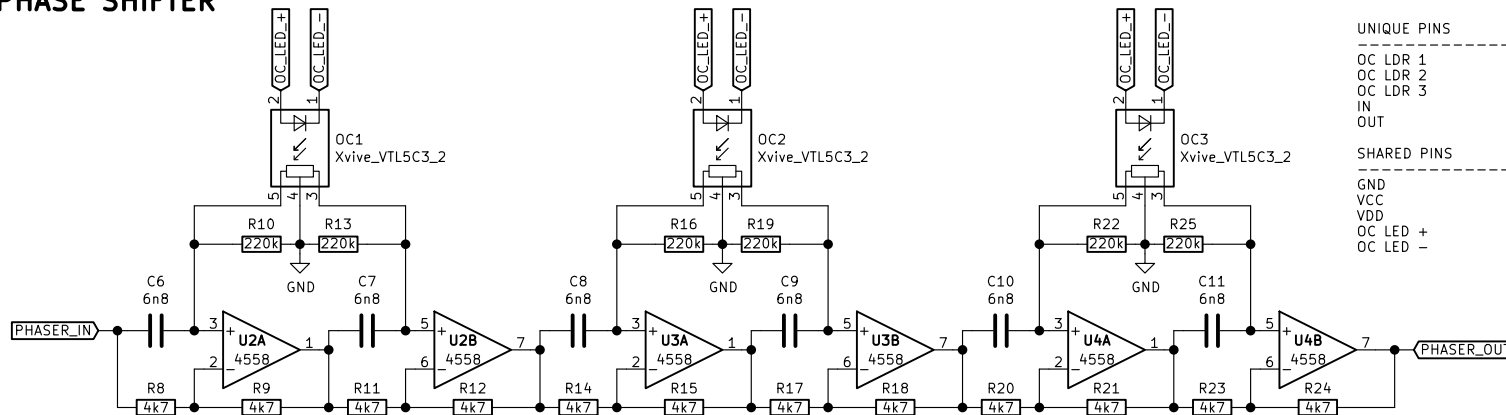


## PHASE SHIFTER



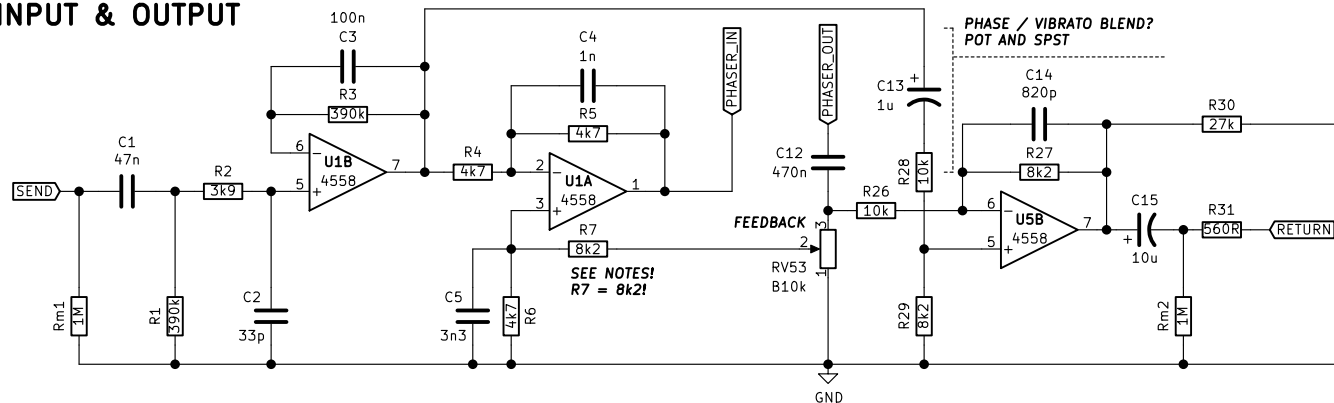
### UNIQUE PINS

OC LDR 1  
OC LDR 2  
OC LDR 3  
IN  
OUT

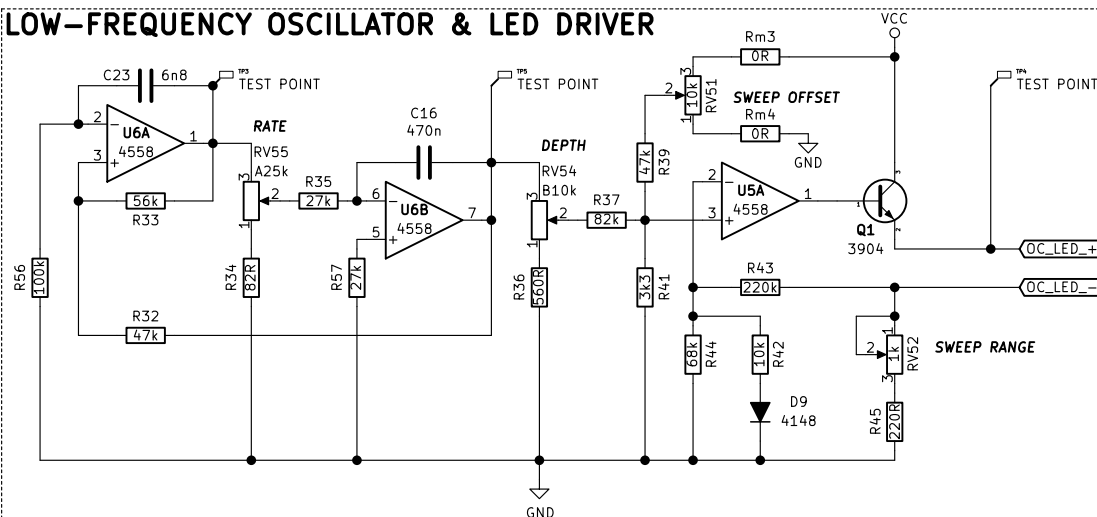
### SHARED PINS

GND  
VCC  
VDD  
OC LED +  
OC LED -

## INPUT & OUTPUT



## LOW-FREQUENCY OSCILLATOR & LED DRIVER



- Check R7 on factory schems, traced schems and biphas schems
- > MusicParts R7: 82k or 8.2k
- > 'Corrected' D. Ayaga / R. Boop: 8k2
- > Biphas R7 = 6k2
- > R7 = 8k2!

- Check R30 on factory schems, traced schems and biphas schems
- > MusicParts R30: 2.7k or 27k
- > 'Corrected' D. Ayaga / R. Boop R30: not present in schematic
- > Biphas R30: not present in schematic
- > R30 = ?? (but probably 27k)

- Add LT1054 dual-rail power supply (+12V/-12V and +17V/-17V)
- Add PMOS reverse polarity protection & clamping diodes
- Add mictester's relay switching circuit (remember 4.7/47n cap modifications?)
- Add optocoupler variants (VTL5C3/2, 1xLED/6xLDR, 6xLED/6xLDR)

- Take resistor & trimpot wattage into account, also for layout

Sheet: /  
File: Musitronics Mu-Tron Phasor II Master Schematic.sch

### Title:

Size: A4

Date:

Rev:

KiCad E.D.A. kicad (5.1.4)-1

Id: 1/1