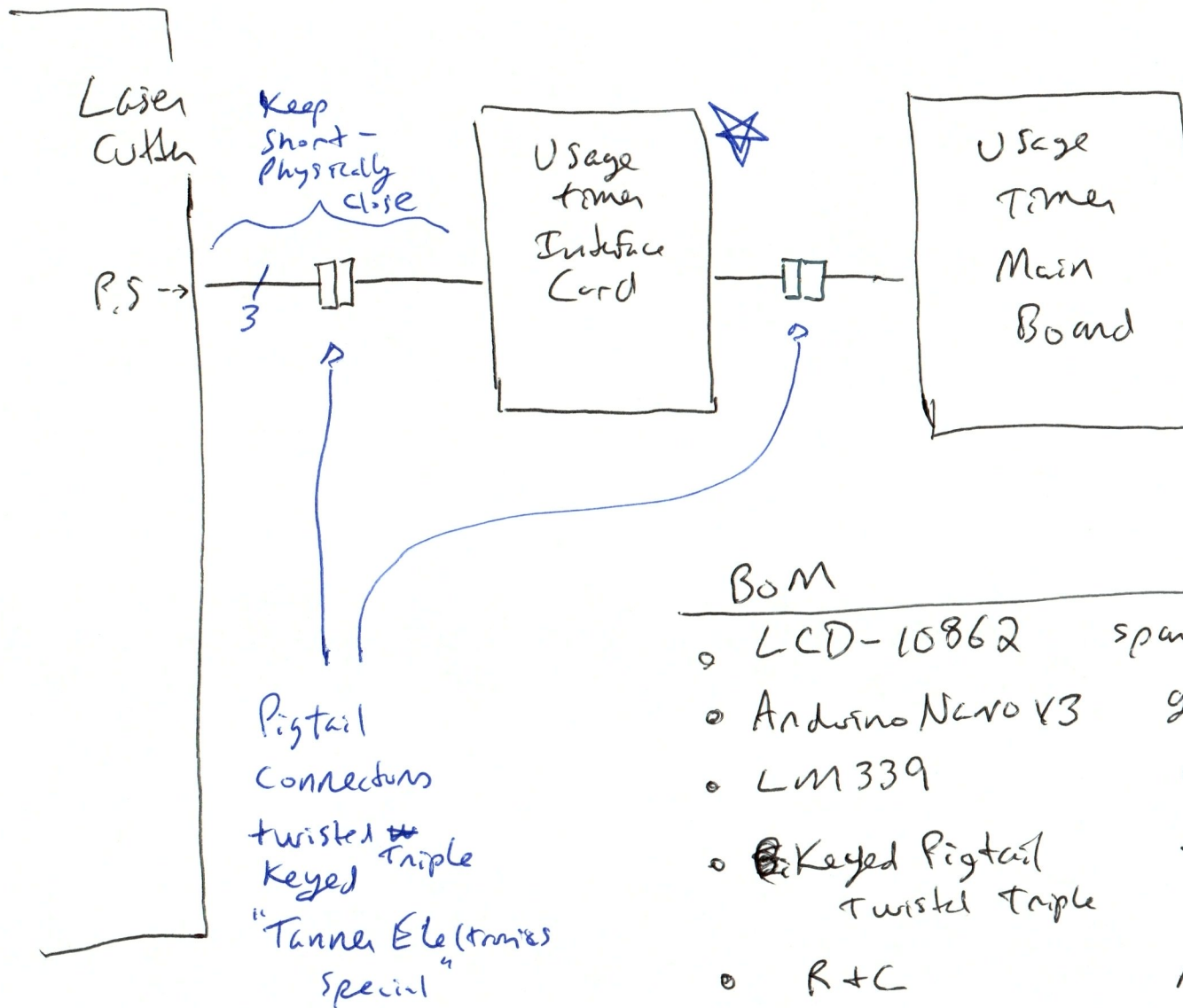


# Usage Timer Block Diagram + BOM

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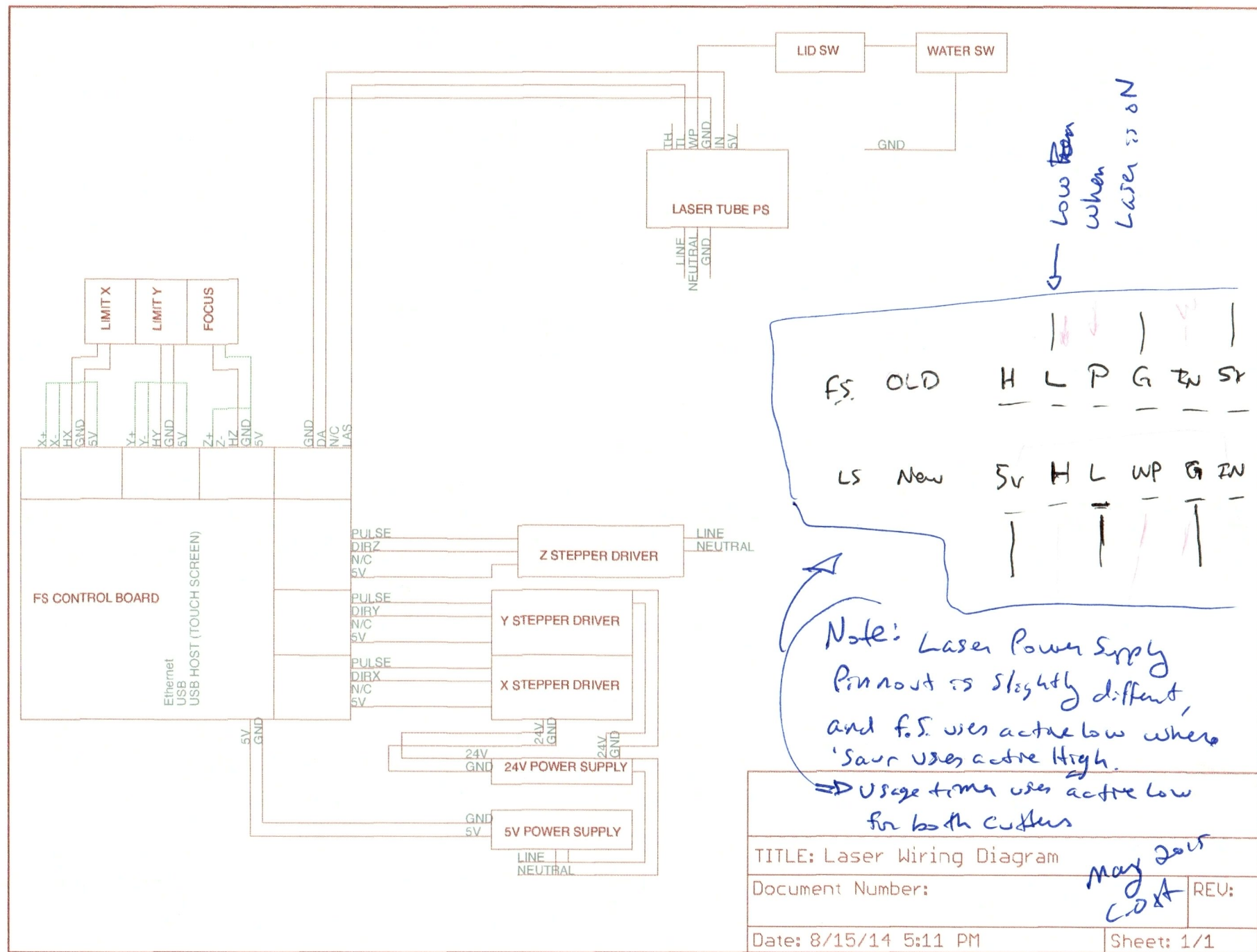


## BOM

- |   |          |
|---|----------|
| • LCD-10862                               | sparkfun |
| • Arduino Nano v3                         | generic  |
| • LM339                                   | old      |
| • <del>Keyed</del> Pigtail Twisted Triple | Tanner's |
| • R+C                                     | MDC      |

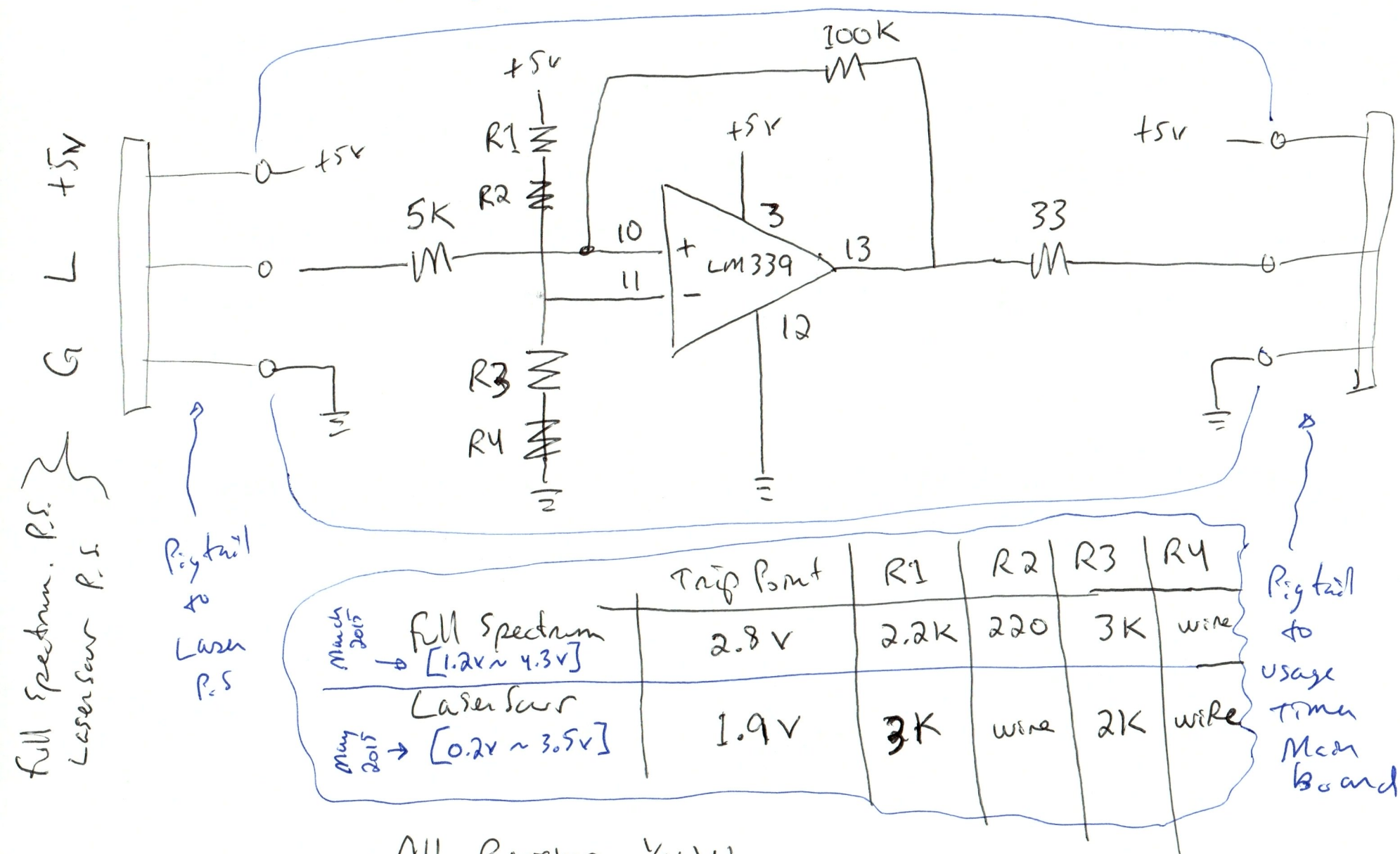
★ Same circuit + sw will work for both the full spectrum and Laser Saw -  
 Except that those have different signal levels @ the P.S.  
 ⇒ Hence, Interface Card has different trigger pins

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 C.O.H



# Usage timer - Interface Board

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All Resistors 1/4W

- ★ This Card: - isolates to minimize risk of Noise Fringing
- Level Shifts P.S. logic to clean Arduino levels
- gives low impedance drive for 4 foot cable in noisy environ.

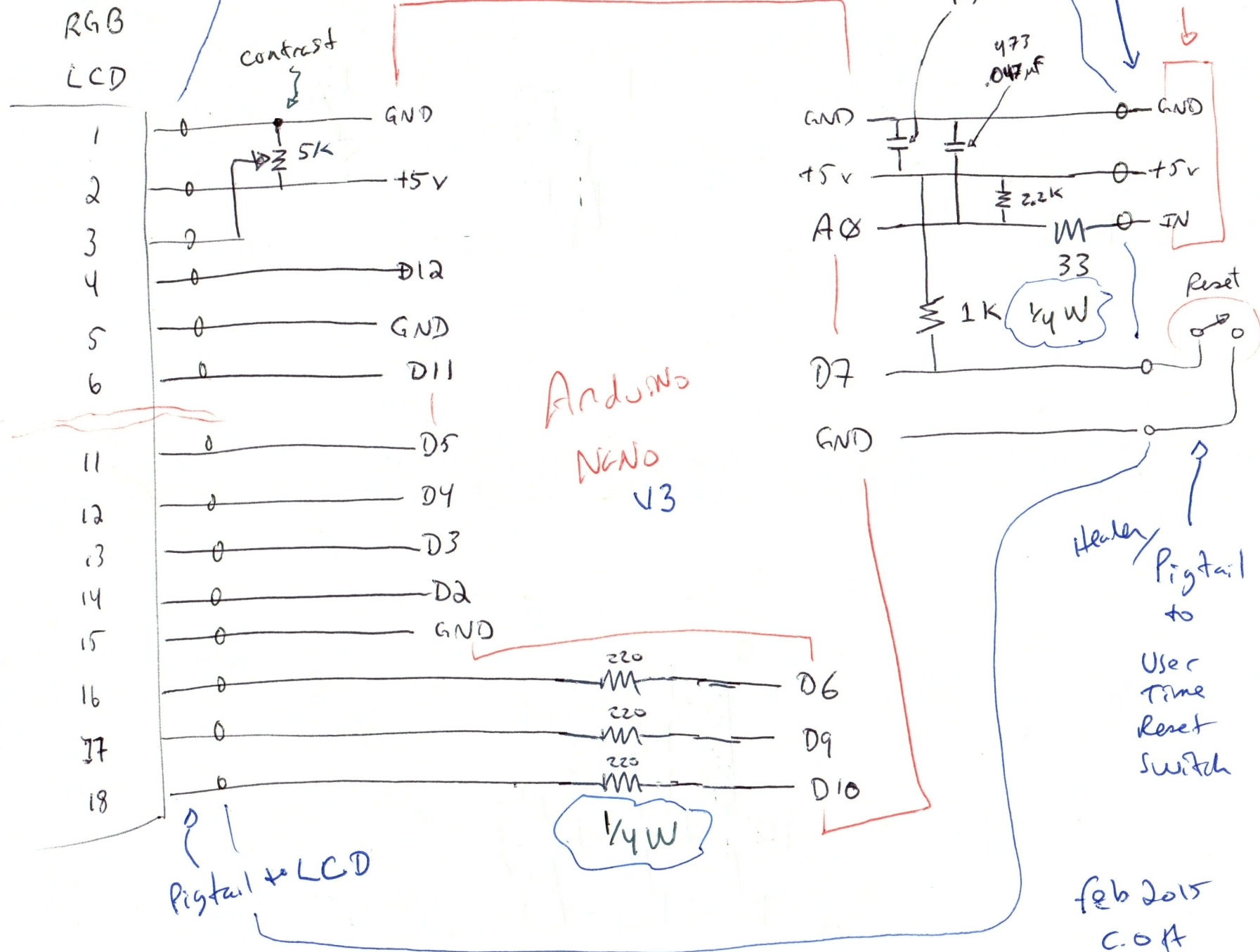
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C. Olt



Sparkfun  
LCD-10862

US Age timer - Mark board

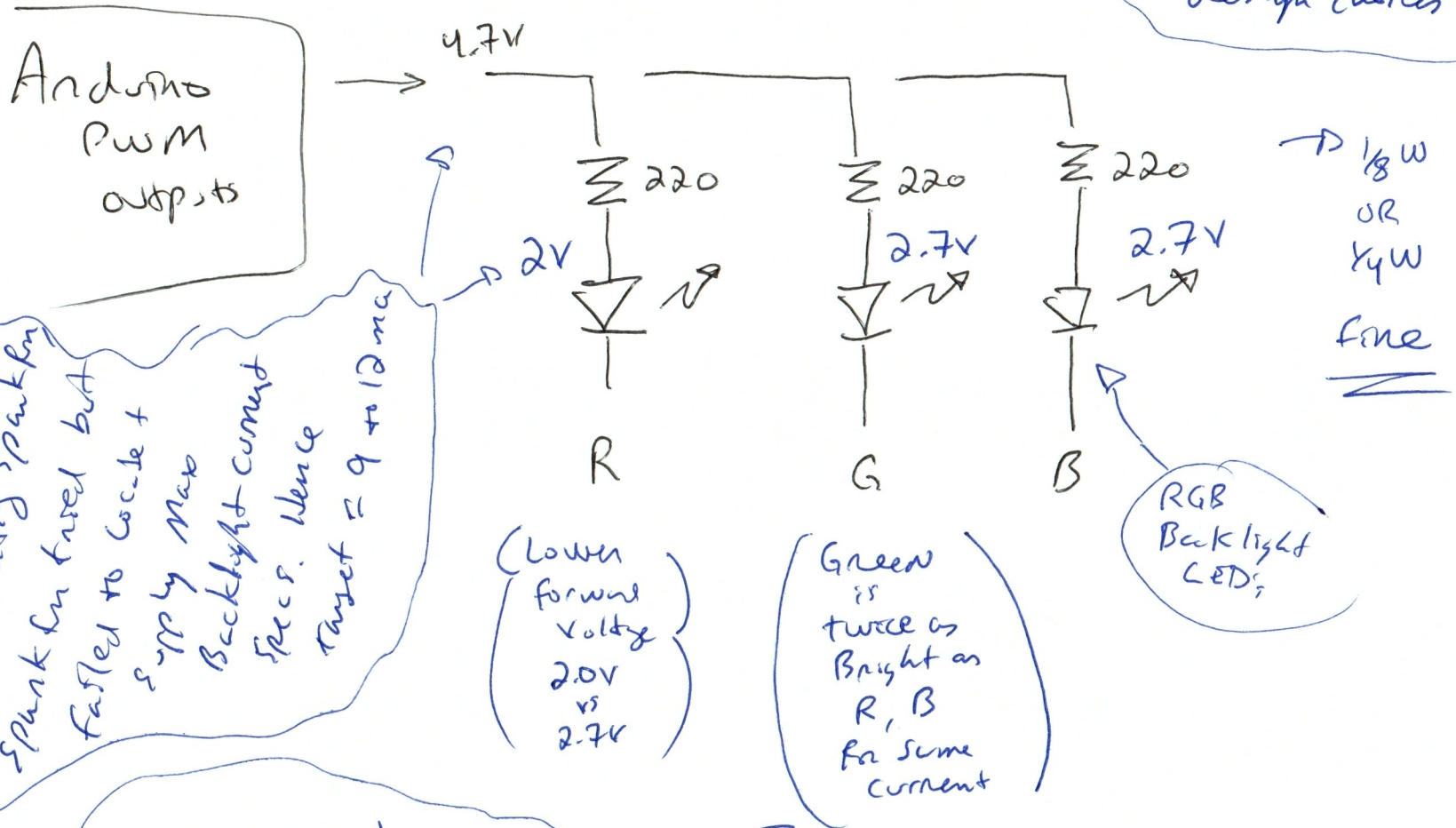
Pytail to  
isolator  
board 4/6



# RGB LCD - Backlight I-V settings

(Sparkfun LCD-10862)

empirical  
selections -  
design choices



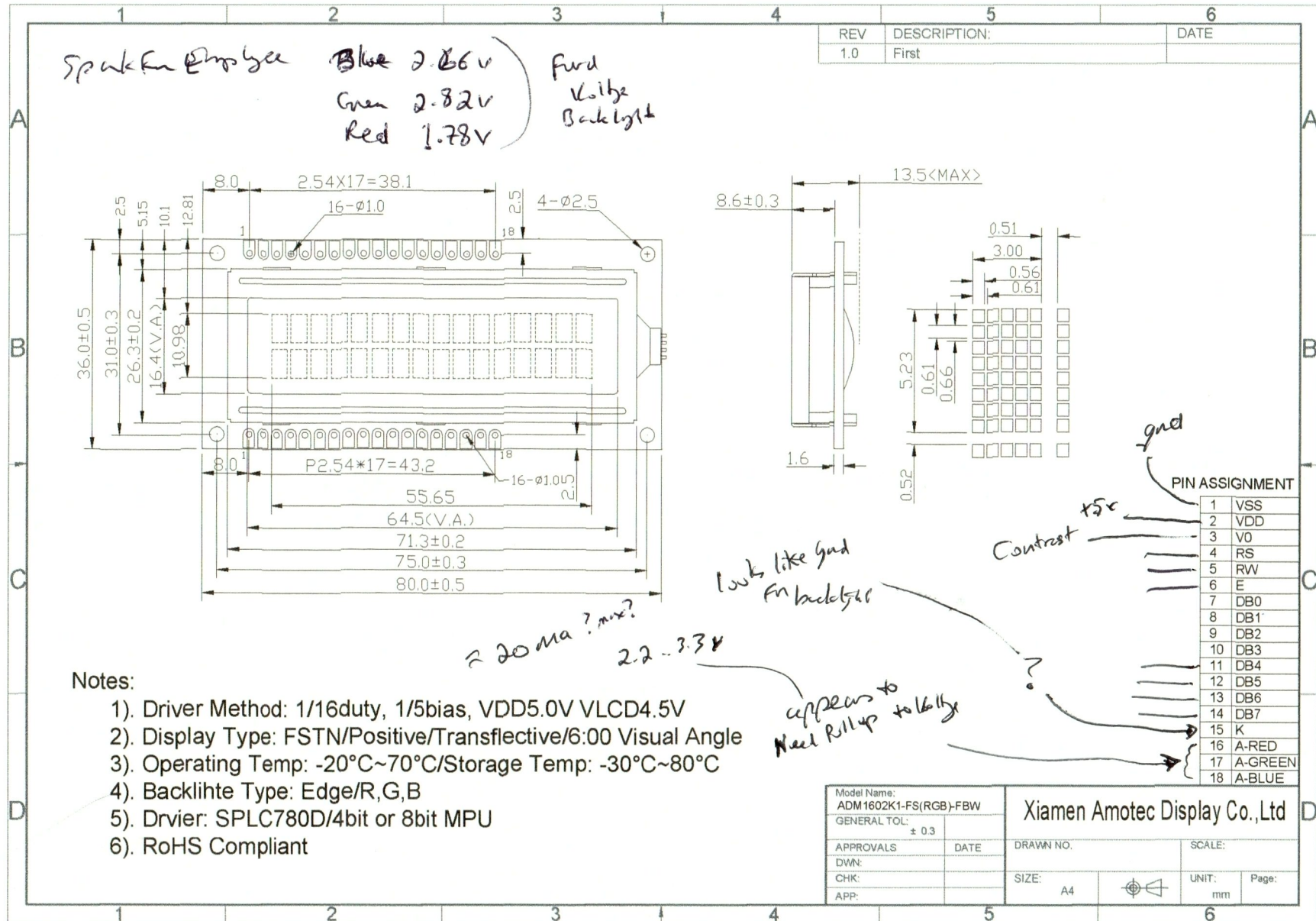
Compensate  
in code to map

Standard RGB values to typical colors  
i.e. keep same Resistor values

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C. CH

Cool idea → change to Red when fmg  
Green when not fmg

6/6



Spunk for LCD-10862