SUMMARY

PAGE #	INDEX
1	COVER PAGE
2	CLOCK AND POWER SUPPLY
3	TIMER
4	SCORE

[02] CLOCK AND POWER SUPPLY

File: clock_and_power.kicad_sch

[03] TIMER

File: timer.kicad_sch

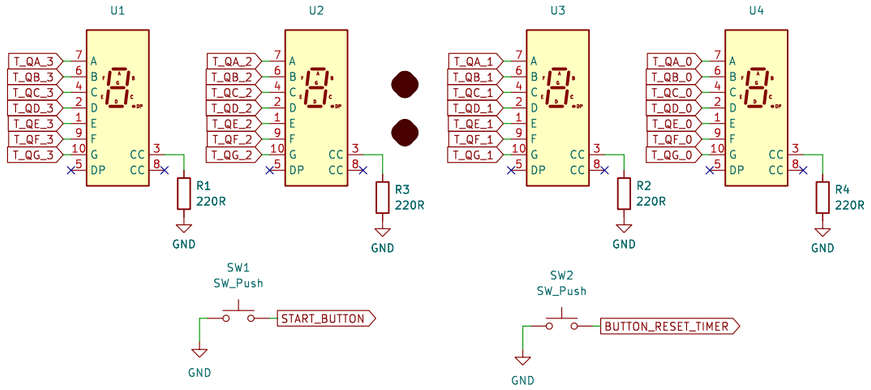
[04] SCORE

File: score.kicad_sch

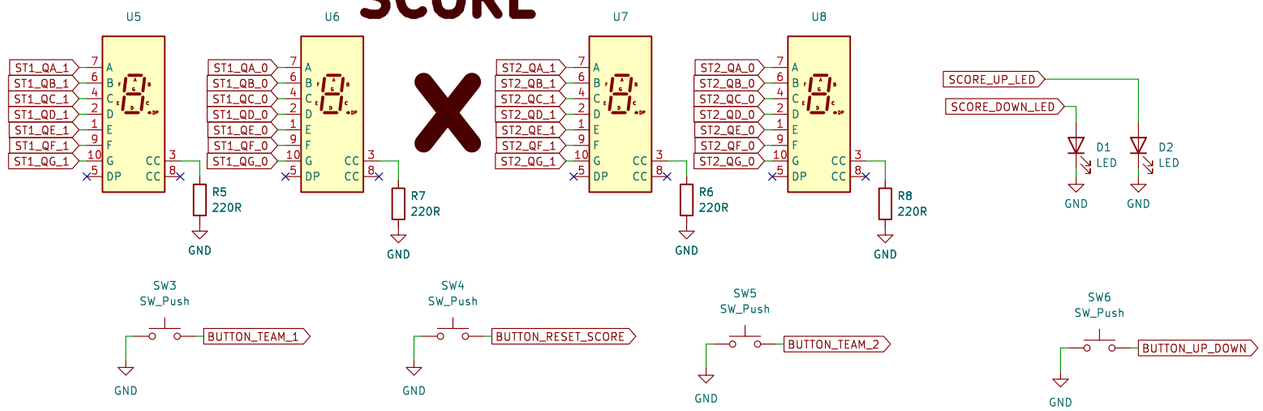
DIGITAL SCOREBOARD
(WITHOUT uC)

Sleman

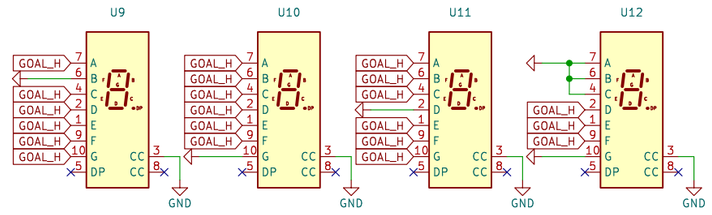
TIMER



SCORE



GOAL DISPLAY



www.slemanz.com

Sheet: /

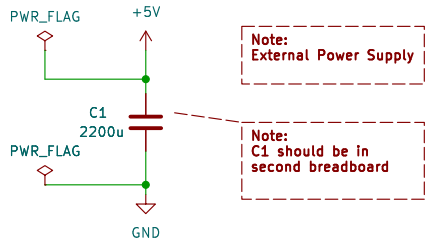
File: Digital_Scoreboard.kicad_sch

Title: DIGITAL SCOREBOARD

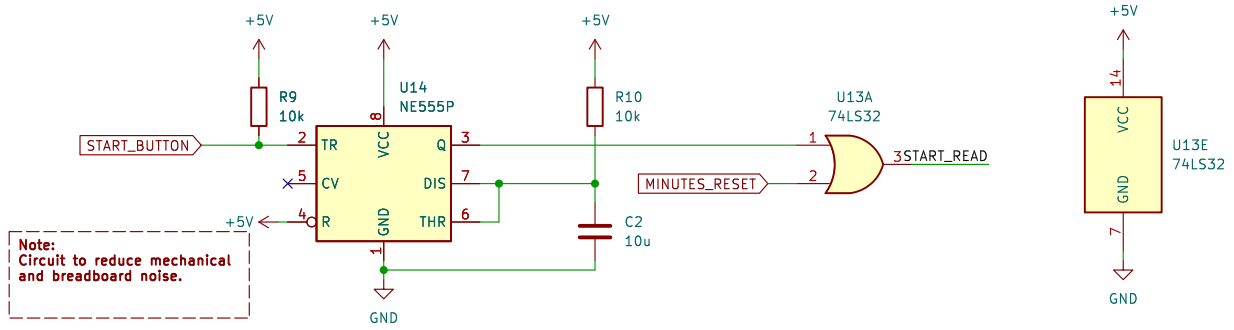
Size: A3	Date:	Rev: 1.0
KiCad E.D.A. kicad 7.0.5		Id: 1/4

[02] CLOCK AND POWER SUPPLY

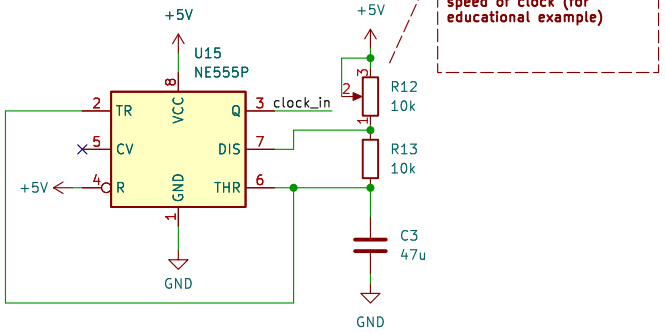
Power Supply



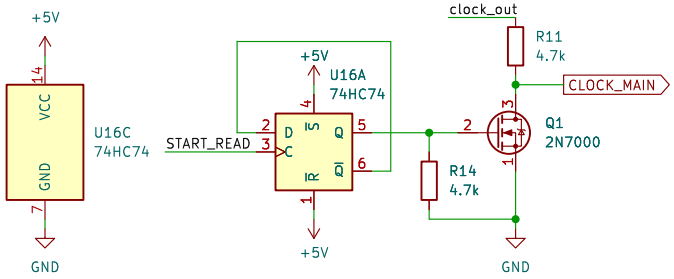
Clock – Read Button



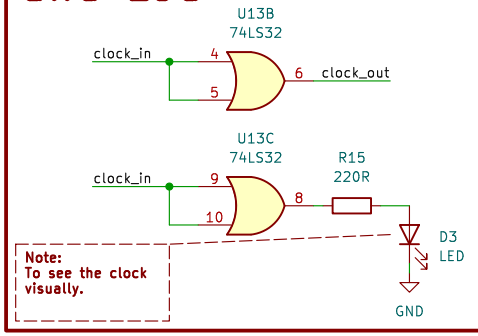
Clock



Clock – Start/Stop



Clock – Buffer and Led



Not used

www.slemanz.com

Sheet: /[02] CLOCK AND POWER SUPPLY/

File: clock_and_power.kicad_sch

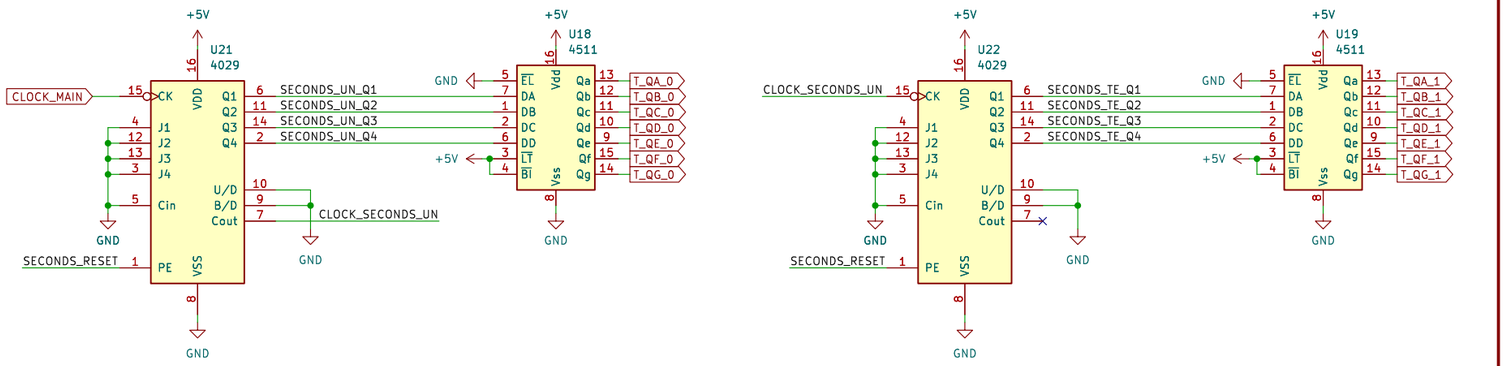
Title: DIGITAL SCOREBOARD

Size: A4	Date:	Rev: 1.0
KiCad E.D.A. kicad 7.0.5		Id: 2/4

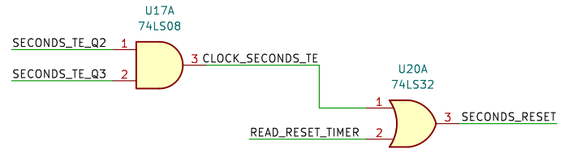
[03] TIMER

Timer – Seconds

Note:
T = Timer
UN = Units
TE = Tens

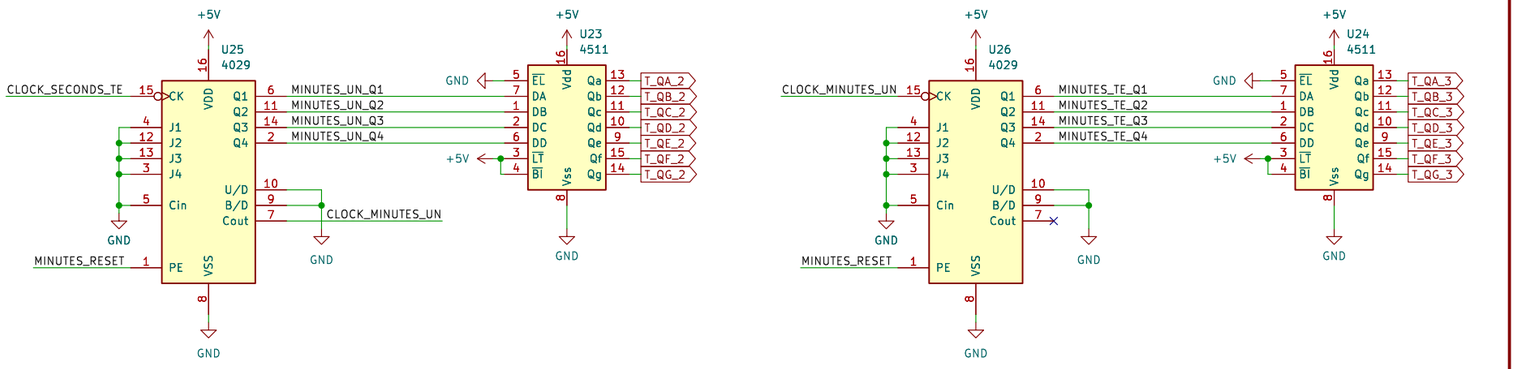


Timer – Seconds Reset

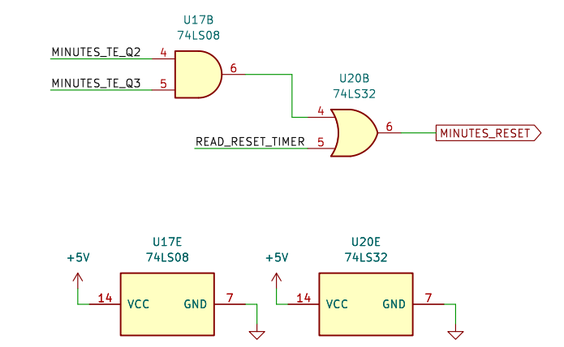


Note:
Reset in bit 0110 -> number 6 (to counts from 0 to 59). And can be reset manually too.

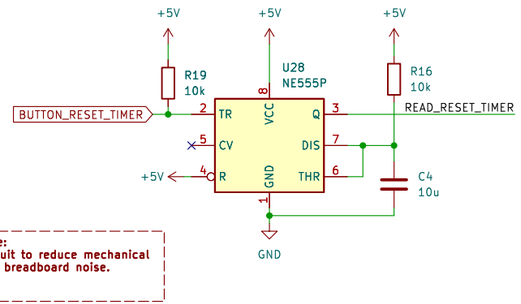
Timer – Minutes



Timer – Minutes Reset

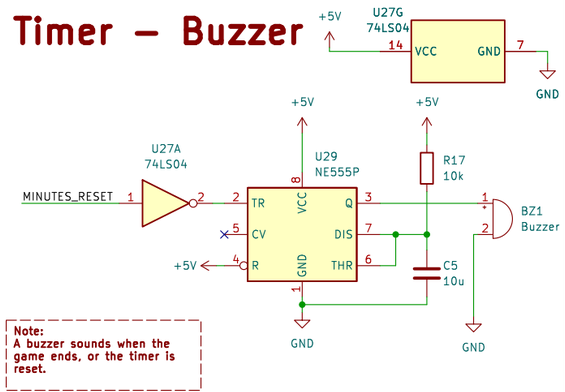


Timer – Read Reset Button



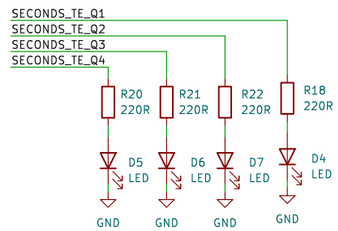
Note:
Circuit to reduce mechanical and breadboard noise.

Timer – Buzzer



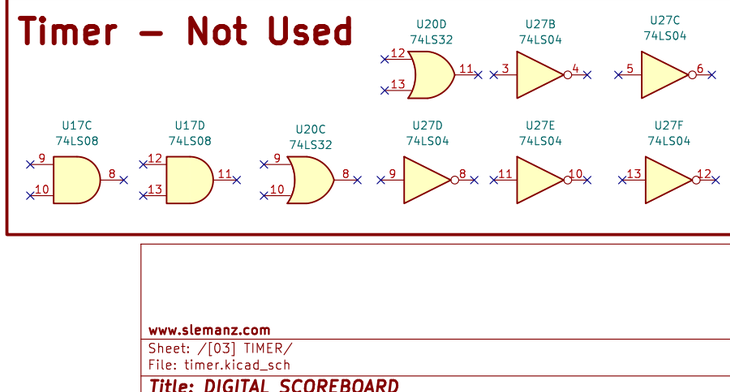
Note:
A buzzer sounds when the game ends, or the timer is reset.

Timer – Leds



Note:
Just to see visually the first digit in binary.

Timer – Not Used



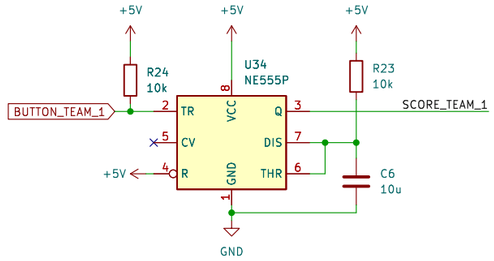
www.slemanz.com
Sheet: /[03] TIMER/
File: timer.kicad_sch

Title: DIGITAL SCOREBOARD

Size: A3	Date:	Rev: 1.0
KiCad E.D.A. kicad 7.0.5		Id: 3/4

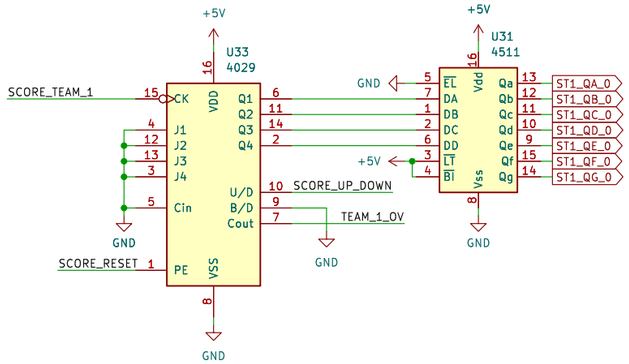
[03] SCORE

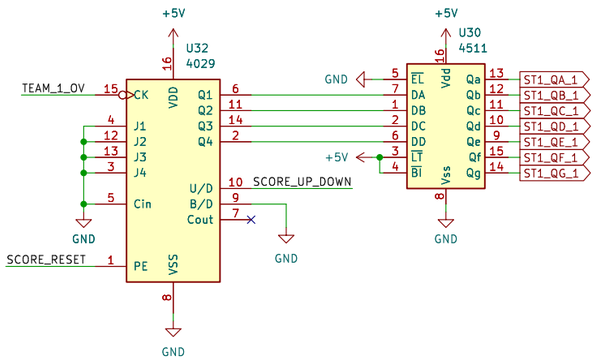
Score – Read Button Team 1



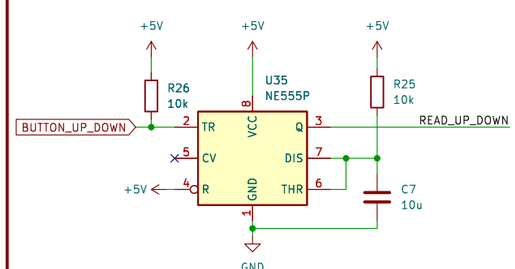
Note:
Circuit to reduce mechanical and breadboard noise.

Score – Team 1

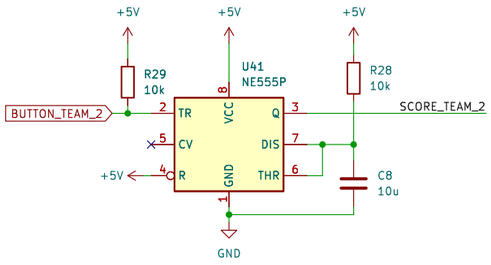




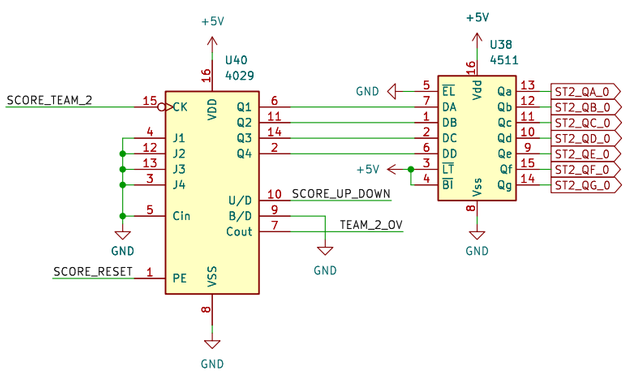
Score – Read Button Up/Down

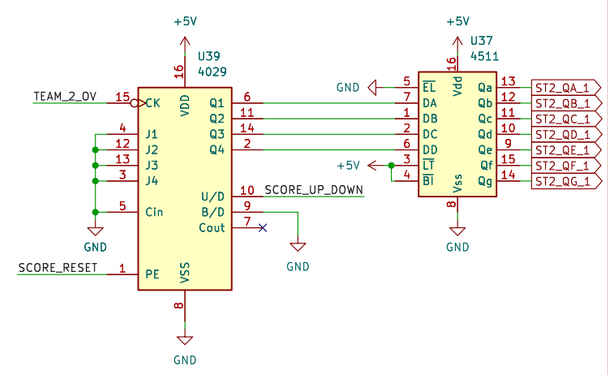


Score – Read Button Team 2

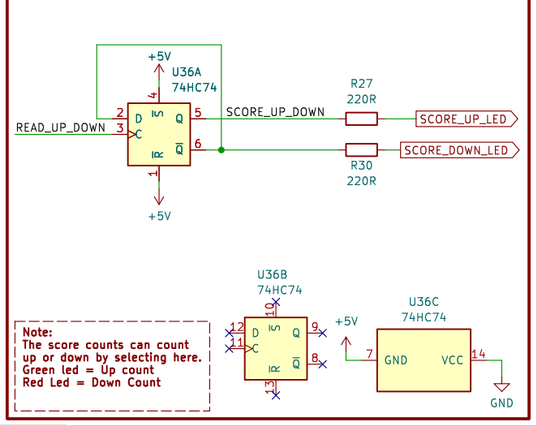


Score – Team 2



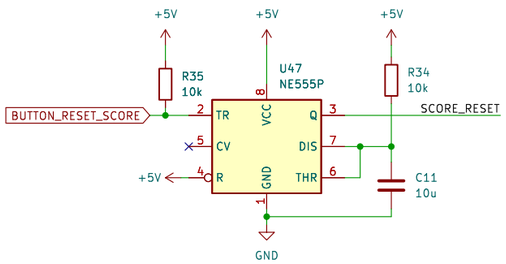


Score – Up/Down Logic

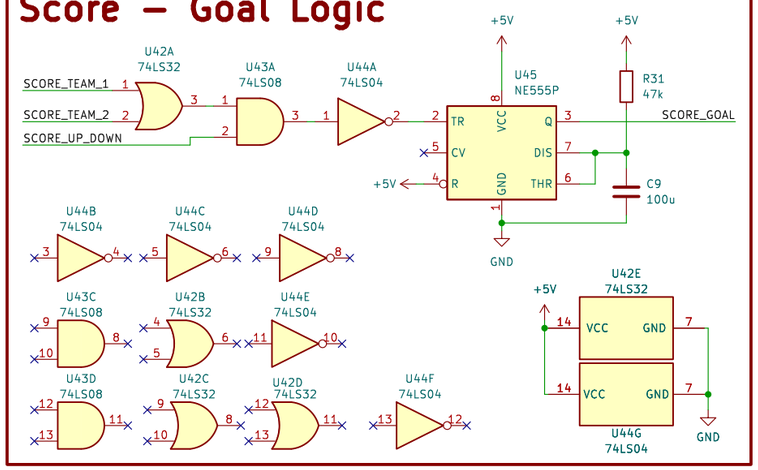


Note:
The score counts can count up or down by selecting here.
Green led = Up count
Red Led = Down Count

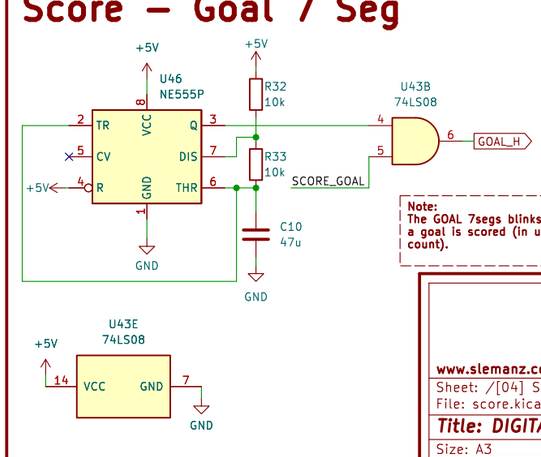
Score – Read Button Reset



Score – Goal Logic

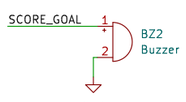


Score – Goal 7 Seg



Note:
The GOAL 7segs blinks when a goal is scored (in up count).

Score – Buzzer



Note:
A buzzer sounds when a goal is scored.

www.slemanz.com
Sheet: /[04] SCORE/
File: score.kicad_sch

Title: DIGITAL SCOREBOARD

Size: A3	Date:	Rev: 1.0
KiCad E.D.A. kicad 7.0.5		Id: 4/4