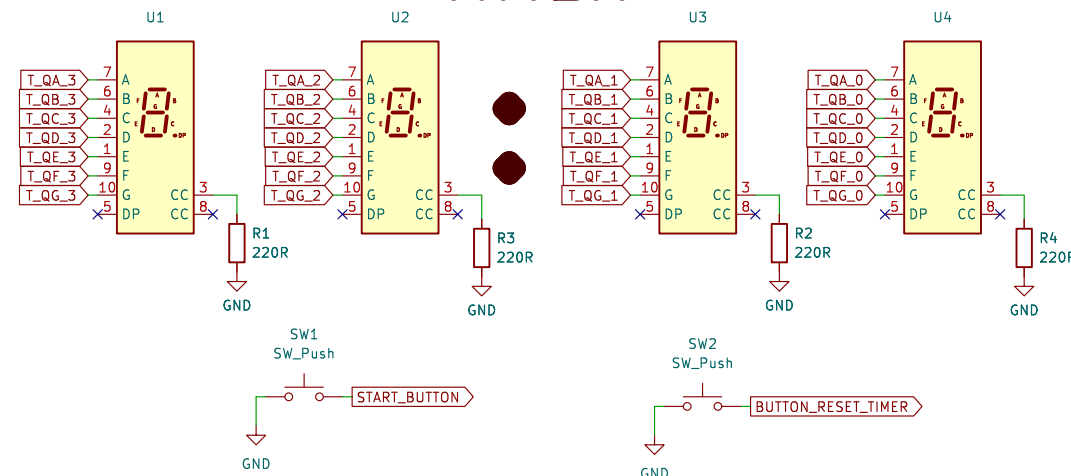


SUMMARY

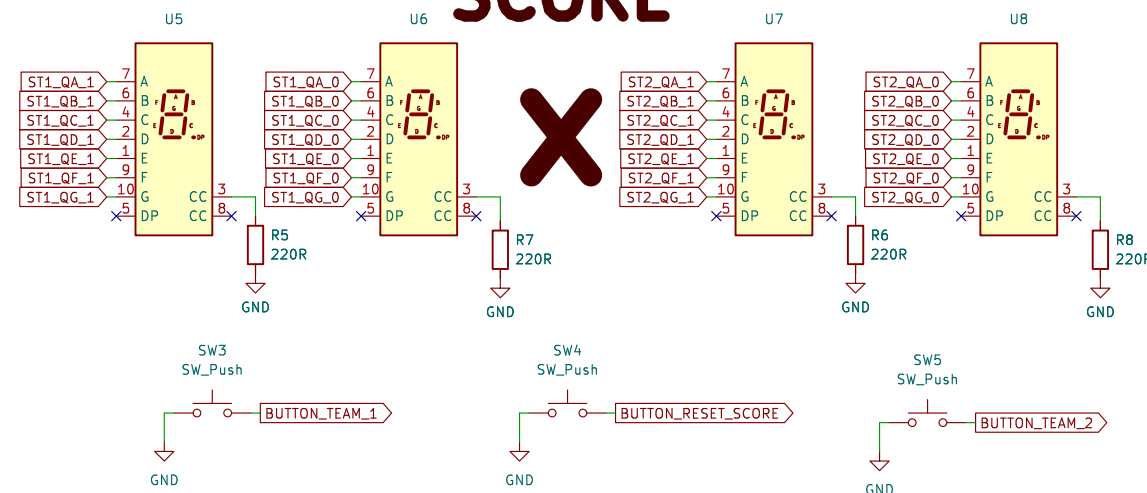
PAGE #	INDEX
1	COVER PAGE
2	CLOCK
2	POWER SUPPLY
3	TIMER
4	SCORE

DIGITAL SCOREBOARD (WITHOUT uC)

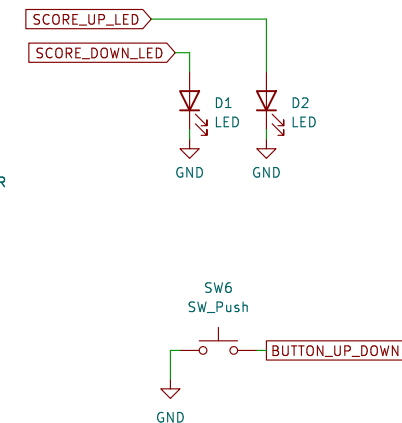
TIMER



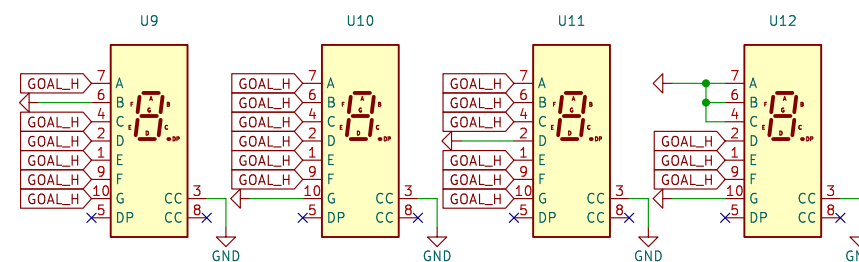
SCORE



UP/DOWN



GOAL DISPLAY

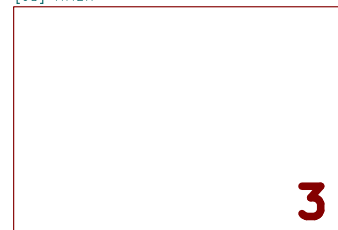


[02] CLOCK AND POWER SUPPLY



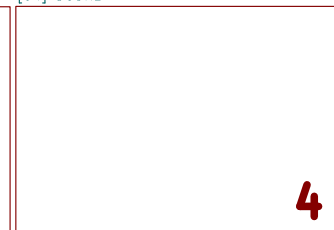
File: clock_and_power.kicad_sch

[03] TIMER



File: timer.kicad_sch

[04] SCORE



File: score.kicad_sch

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Sheet: /

File: DigitalScoreboard.kicad_sch

Title: Scoreboard

Size: A3

Date:

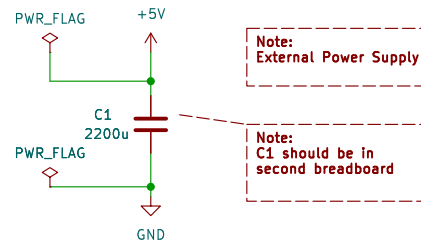
Rev: 1.0

KiCad E.D.A. kicad 7.0.5

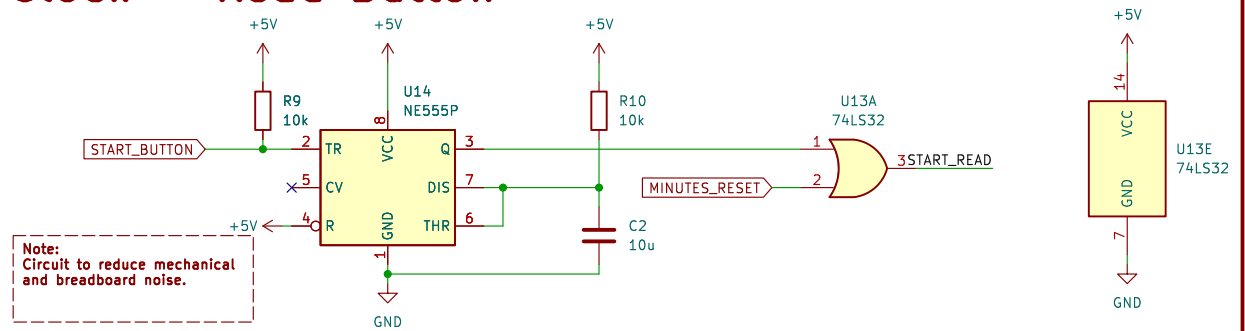
Id: 1/4

[02] CLOCK AND POWER SUPPLY

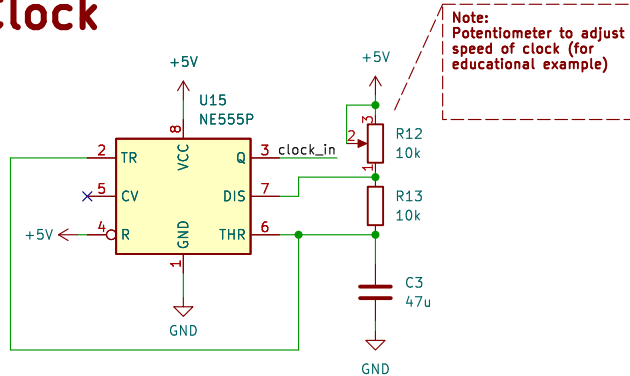
Power Supply



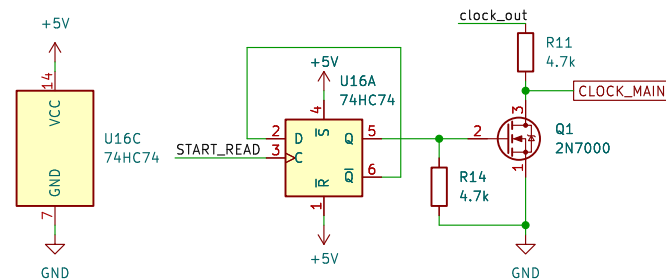
Clock – Read Button



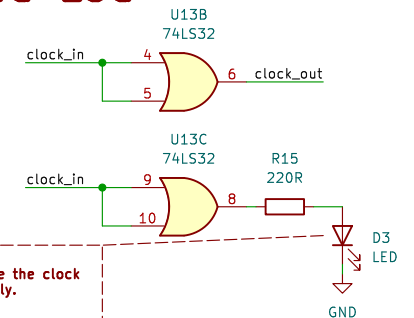
Clock



Clock – Start/Stop



Clock – Buffer and Led



Not used



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Sheet: /[02] CLOCK AND POWER SUPPLY/
File: clock_and_power.kicad_sch

Title: DIGITAL SCOREBOARD

Size: A4

Date:

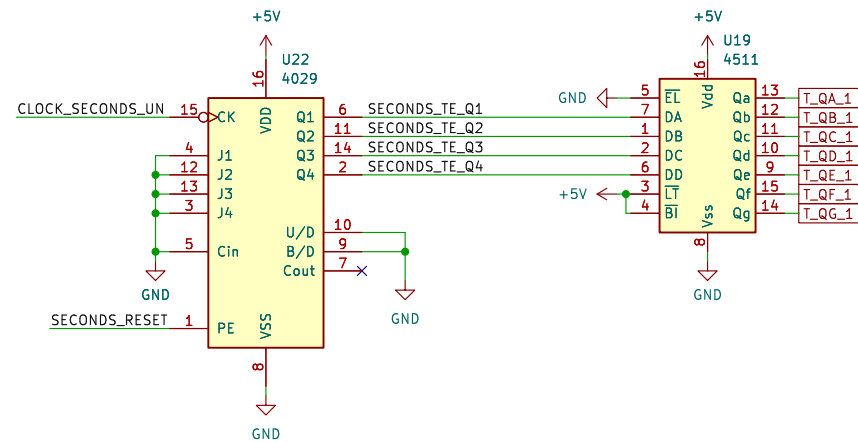
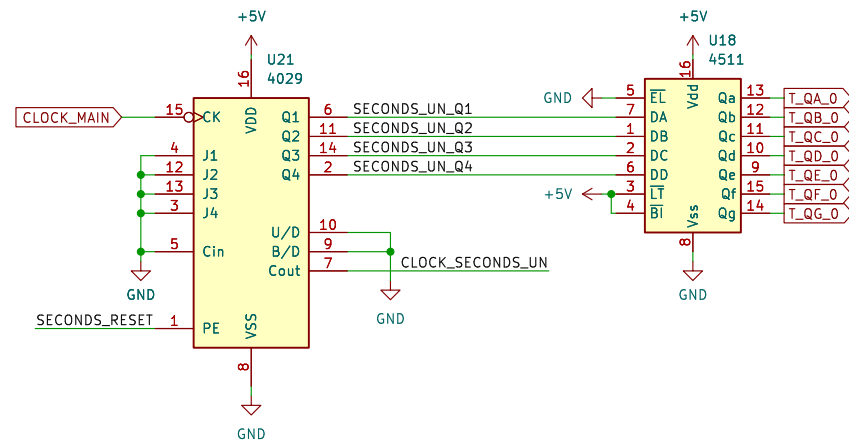
KiCad E.D.A. kicad 7.0.5

Rev: 1.0

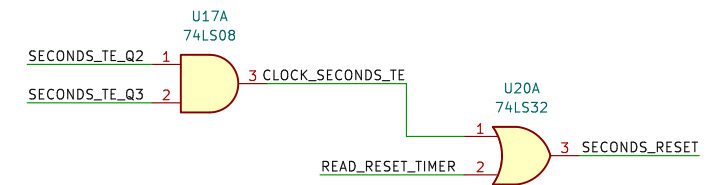
Id: 2/4

[03] TIMER

Timer – Seconds

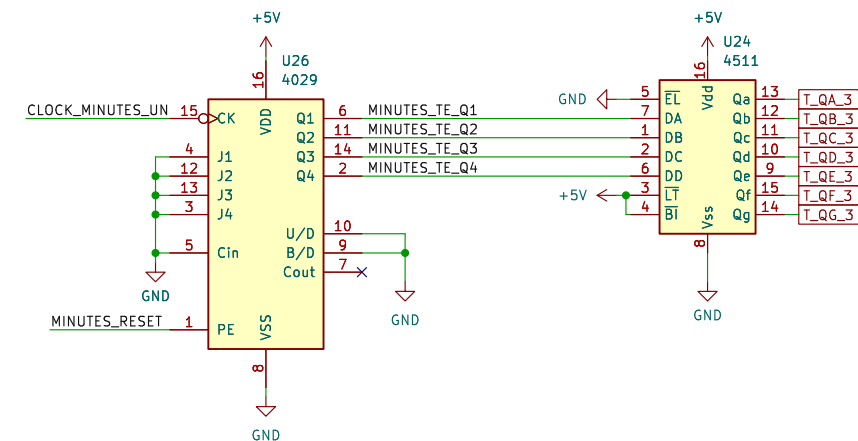
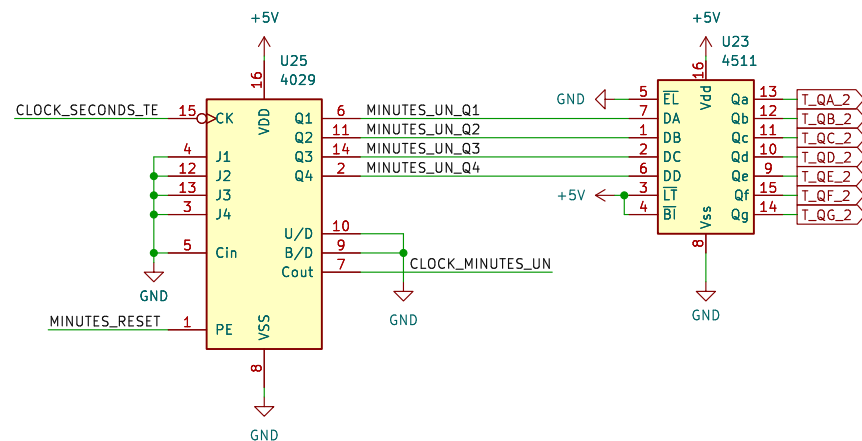


Timer – Seconds Reset

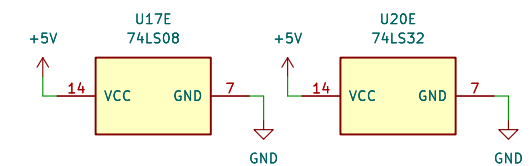
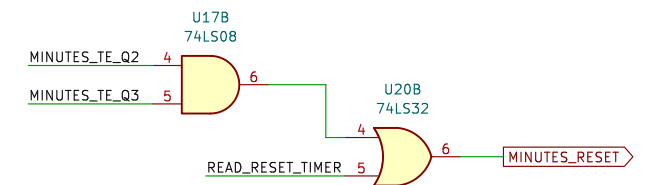


Note:
Reset in bit 0110 -> number 6 (to counts from 0 to 59). And can be reset manually too.

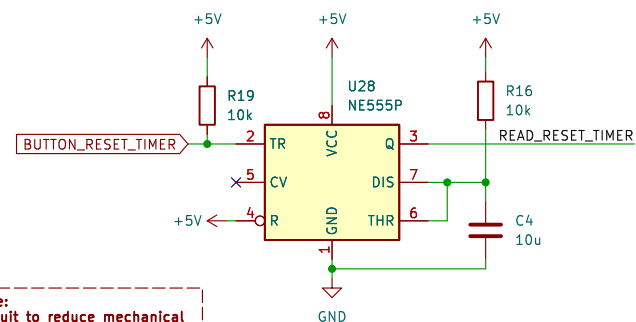
Timer – Minutes



Timer – Minutes Reset

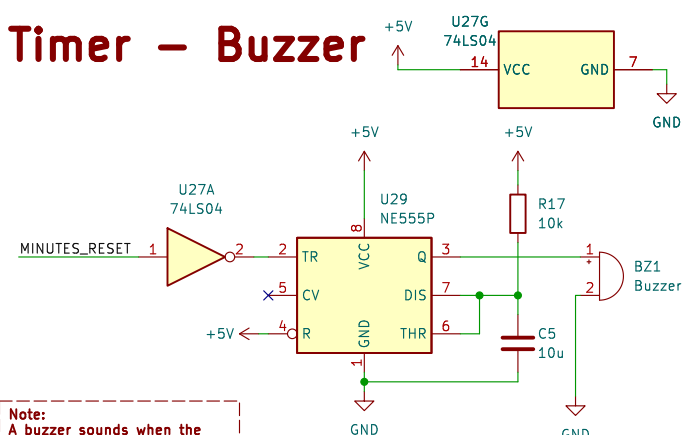


Timer – Read Reset Button



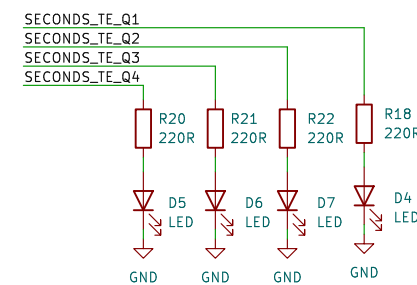
Note:
Circuit to reduce mechanical and breadboard noise.

Timer – Buzzer



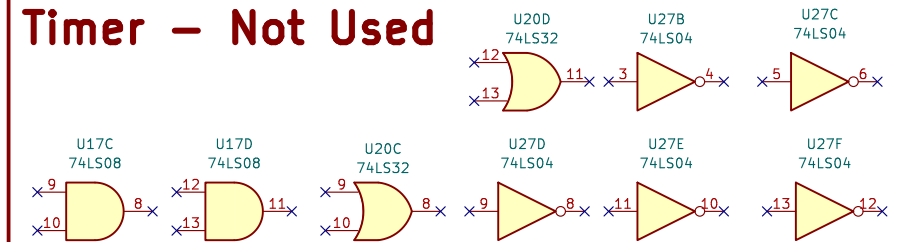
Note:
A buzzer sounds when the game ends, or the timer is reset.

Timer – Leds



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

Timer – Not Used



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Sheet: /[03] TIMER/
File: timer.kicad_sch

Title: DIGITAL SCOREBOARD

Size: A3
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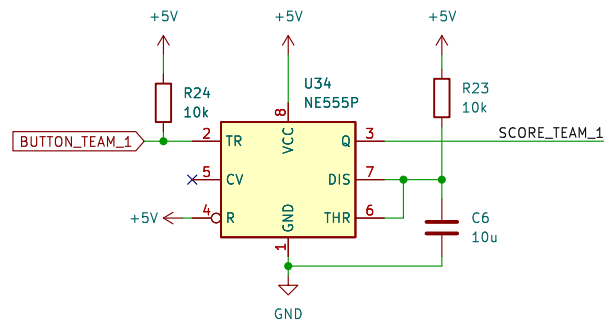
Date:

Rev: 1.0

Id: 3/4

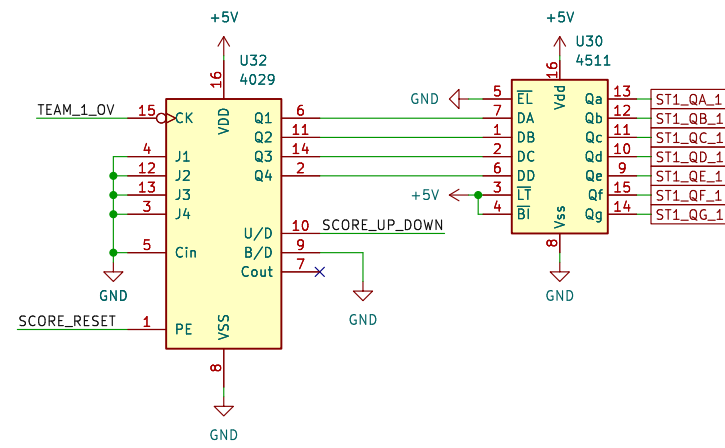
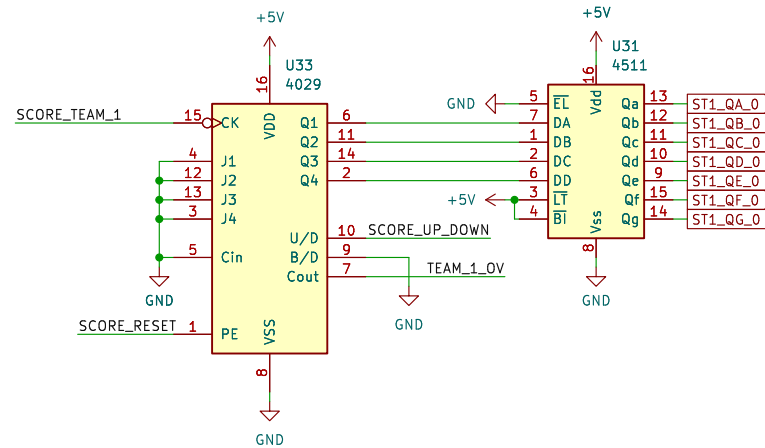
[04] SCORE

Score – Read Button Team 1

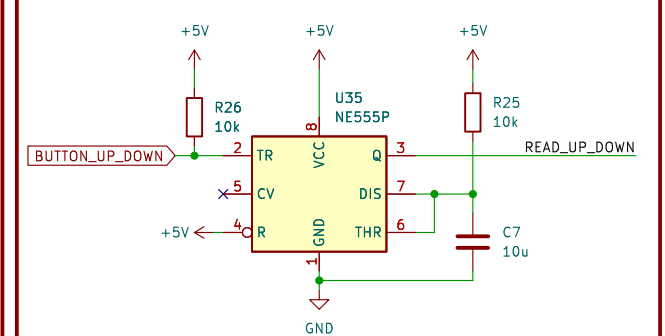


Note:
Circuit to reduce mechanical
and breadboard noise.

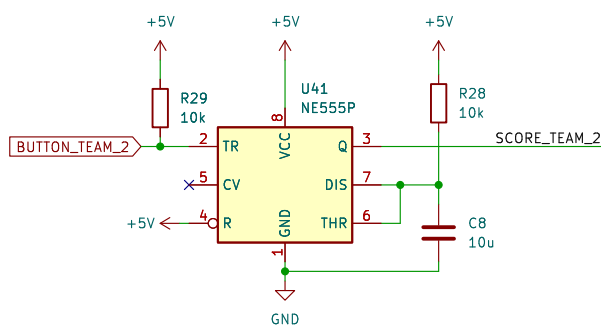
Score – Team 1



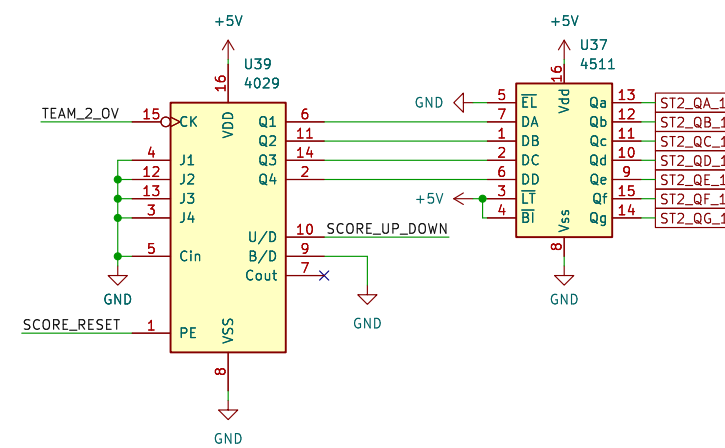
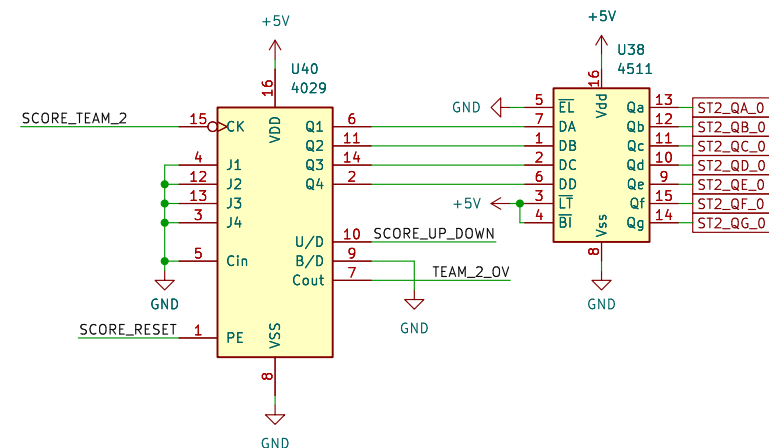
Score – Read Button Up/Down



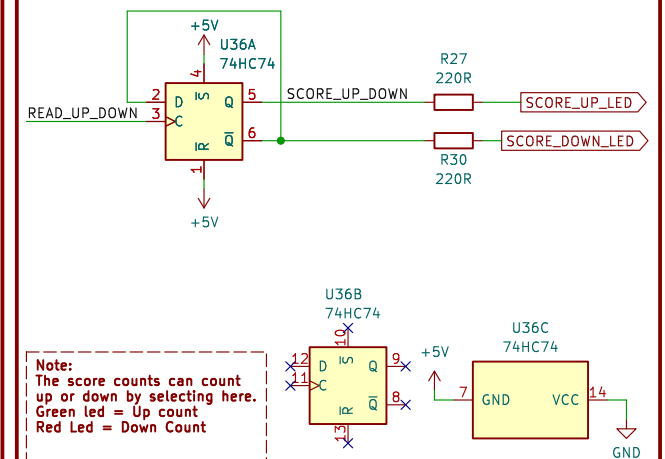
Score – Read Button Team 2



Score – Team 2

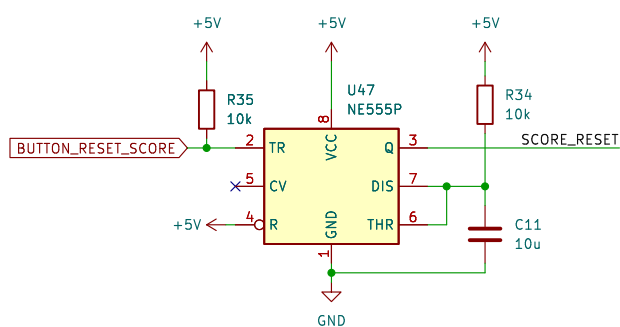


Score – Up/Down Logic

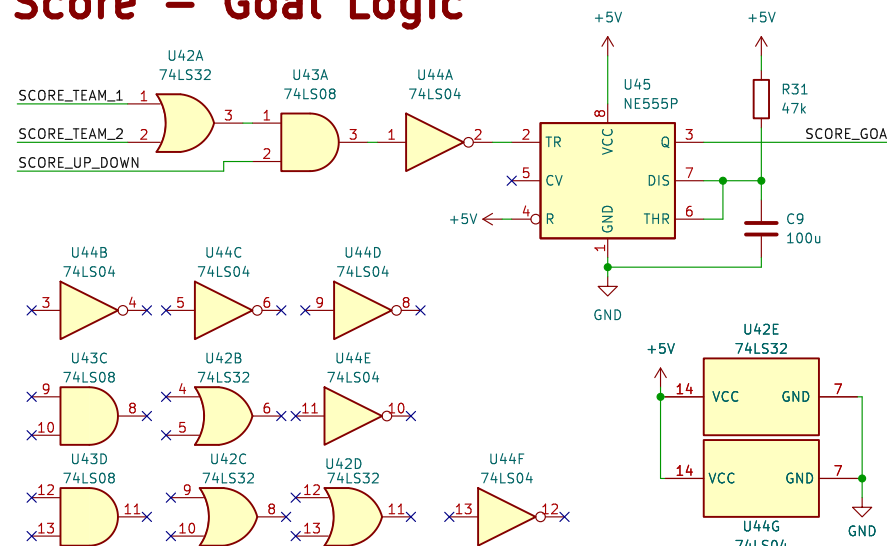


Note:
The score counts can count
up or down by selecting here.
Green led = Up count
Red led = Down Count

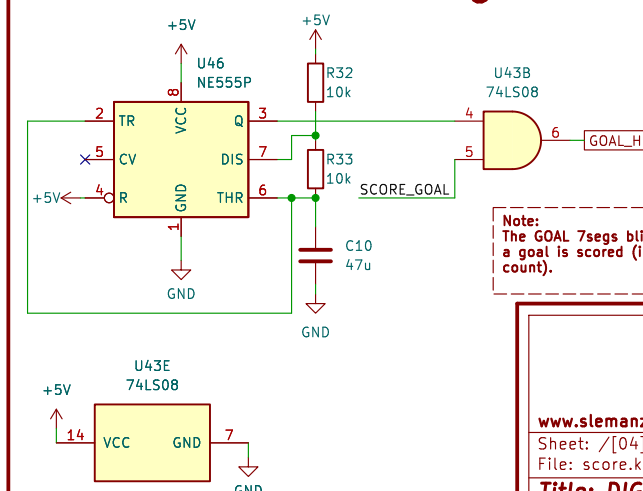
Score – Read Button Reset



Score – Goal Logic

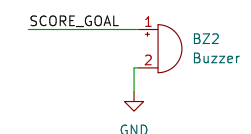


Score – Goal 7 Seg



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

Score – Buzzer



Note:
A buzzer sounds when a goal
is scored.

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Sheet: /[04] SCORE/

File: score.kicad_sch

Title: DIGITAL SCOREBOARD

Size: A3

Date:

Rev: 1.0

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Id: 4/4