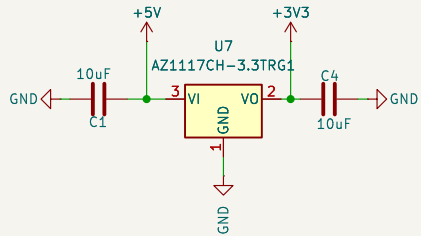
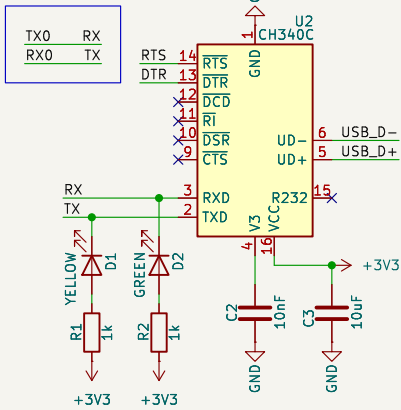


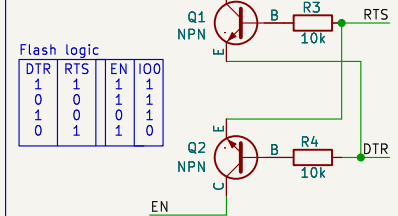
5V -> 3.3V Linear voltage regulator



USB to UART bridge



Auto-Reset



Strapping pins

Pin	Default	Run	Bootloader
IO0	Pull-up	1	0
IO3	Floating	Don't-care	Don't-care
IO45	Pull-down	Don't-care	Don't-care
IO46	Pull-down	Don't-care	0

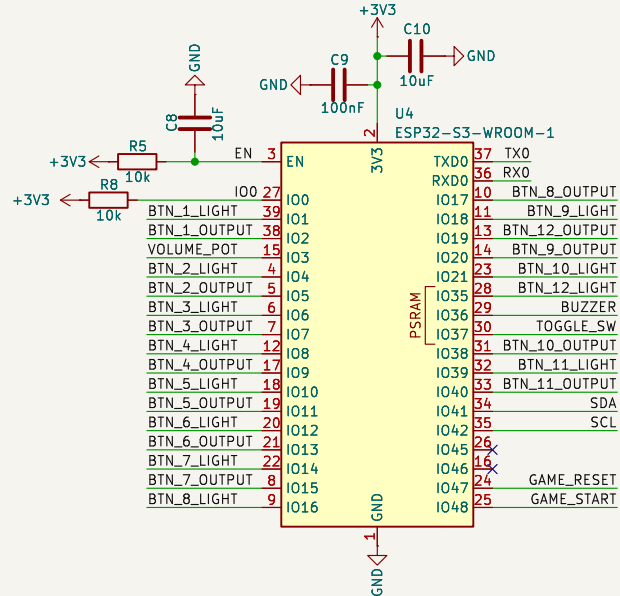
IO0 and IO46 are used to configure the booting mode

IO3 and IO45 can be combined with certain EFUSE parameters respectively control specific JTAG/SPI behaviours

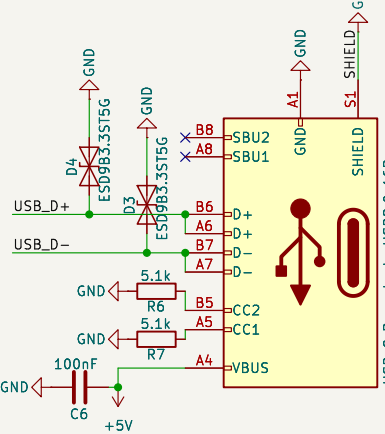
If DTR is LOW:
Changing RTS from HIGH to LOW
will cause the ESP to switch to run mode

If RTS is HIGH:
Changing DTR from LOW to HIGH
will cause the ESP to switch to the bootloader

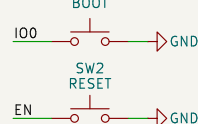
ESP32



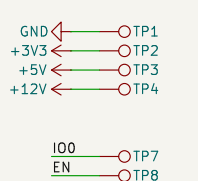
USB-C Connector



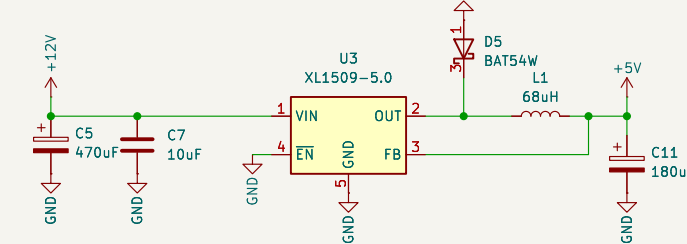
Buttons



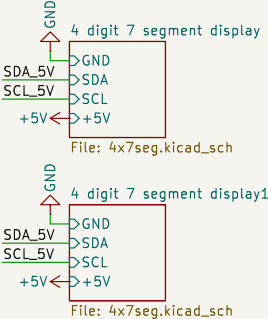
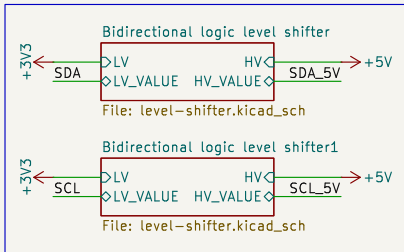
Test points



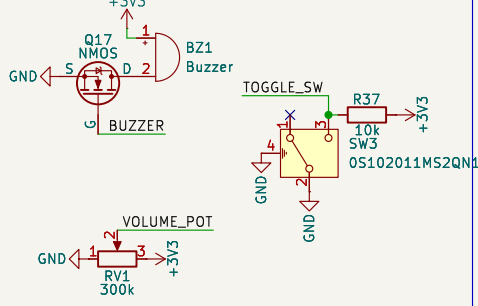
12V->5V Buck Converter



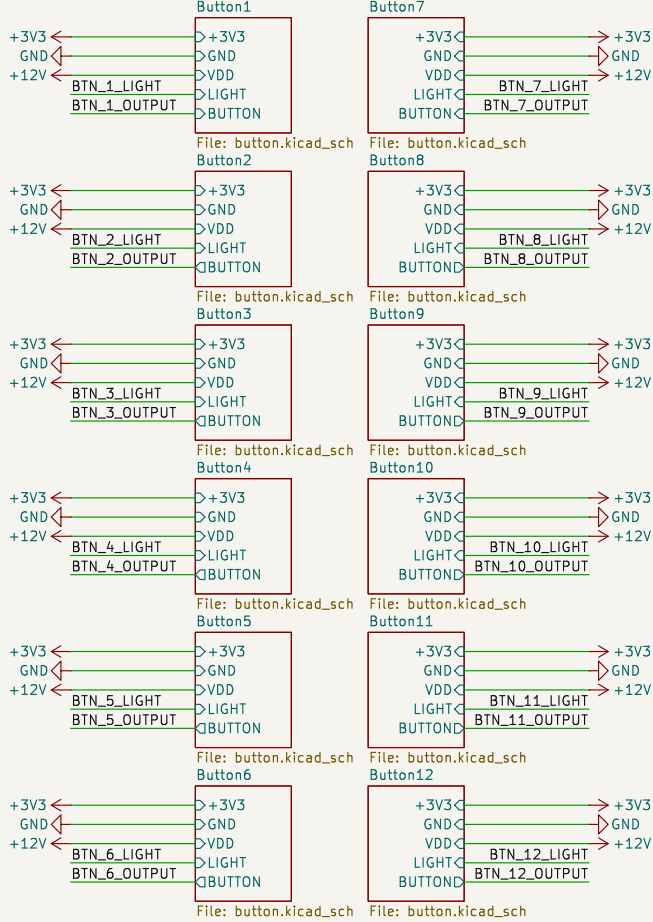
2x 4-digit seven segment displays w/ required level shifting



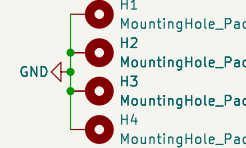
Controls



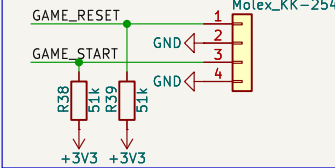
Button connectors



Mounting holes

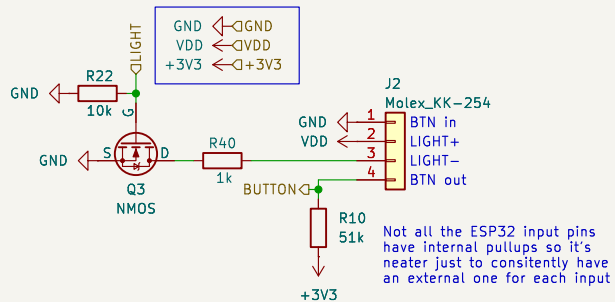


Game reset/start buttons



Power input connector





Sheet: /Button12/
File: button.kicad_sch

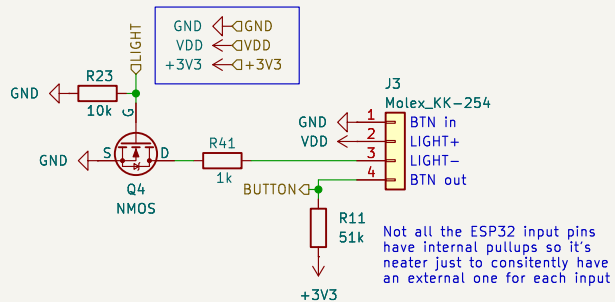
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Size: A5
KiCad E.D.A. 8.0.8

Date:

Rev:

Id: 2/17



Sheet: /Button1/
File: button.kicad_sch

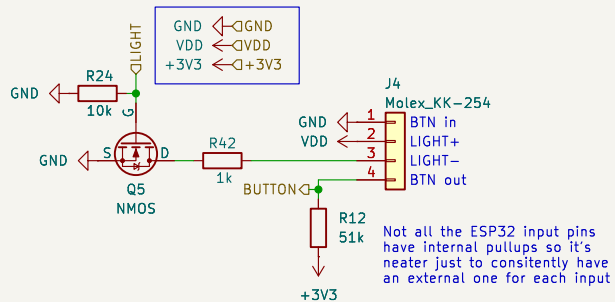
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Size: A5
KiCad E.D.A. 8.0.8

Date:

Rev:

Id: 3/17



Sheet: /Button2/
File: button.kicad_sch

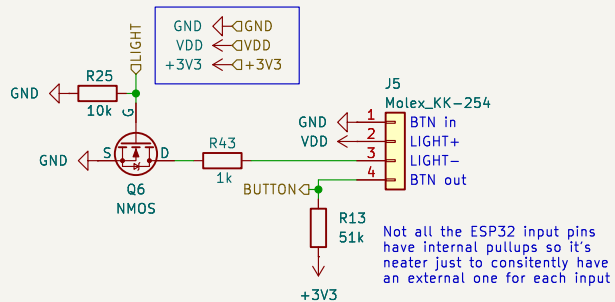
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Size: A5
KiCad E.D.A. 8.0.8

Date:

Rev:

Id: 4/17



Sheet: /Button3/
File: button.kicad_sch

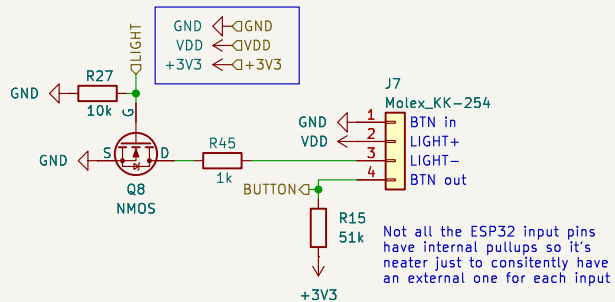
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KiCad E.D.A. 8.0.8

Date:

Rev:

Id: 5/17



Sheet: /Button5/
File: button.kicad_sch

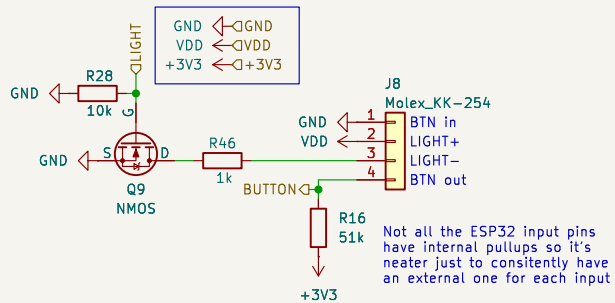
Title:

Size: A5
KiCad E.D.A. 8.0.8

Date:

Rev:

Id: 7/17



Sheet: /Button6/
File: button.kicad_sch

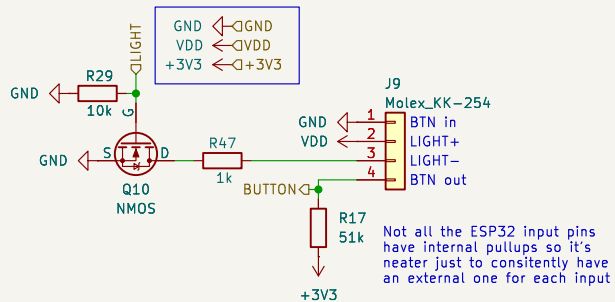
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Date:

Rev:

Id: 8/17



Sheet: /Button7/
File: button.kicad_sch

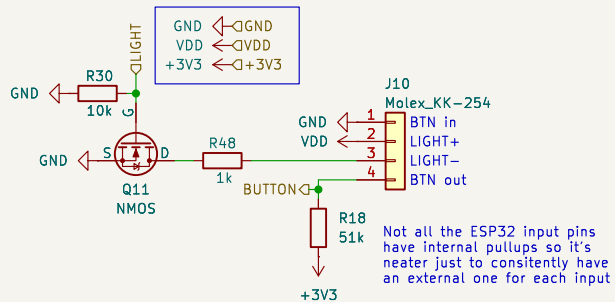
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Size: A5
KiCad E.D.A. 8.0.8

Date:

Rev:

Id: 9/17



Sheet: /Button8/
File: button.kicad_sch

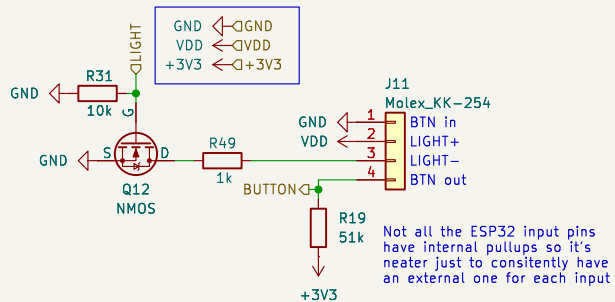
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Size: A5
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Date:

Rev:

Id: 10/17



Sheet: /Button9/
File: button.kicad_sch

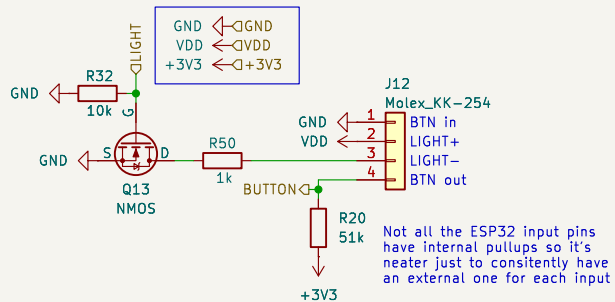
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Date:

Rev:

Id: 11/17



Sheet: /Button10/
File: button.kicad_sch

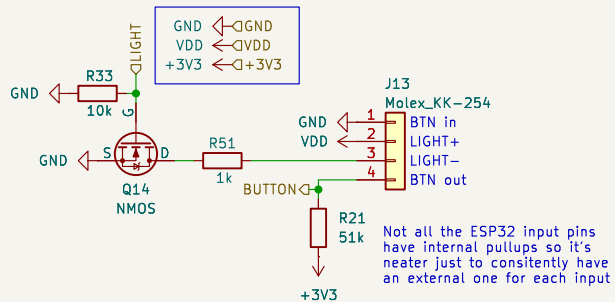
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KiCad E.D.A. 8.0.8

Date:

Rev:

Id: 12/17



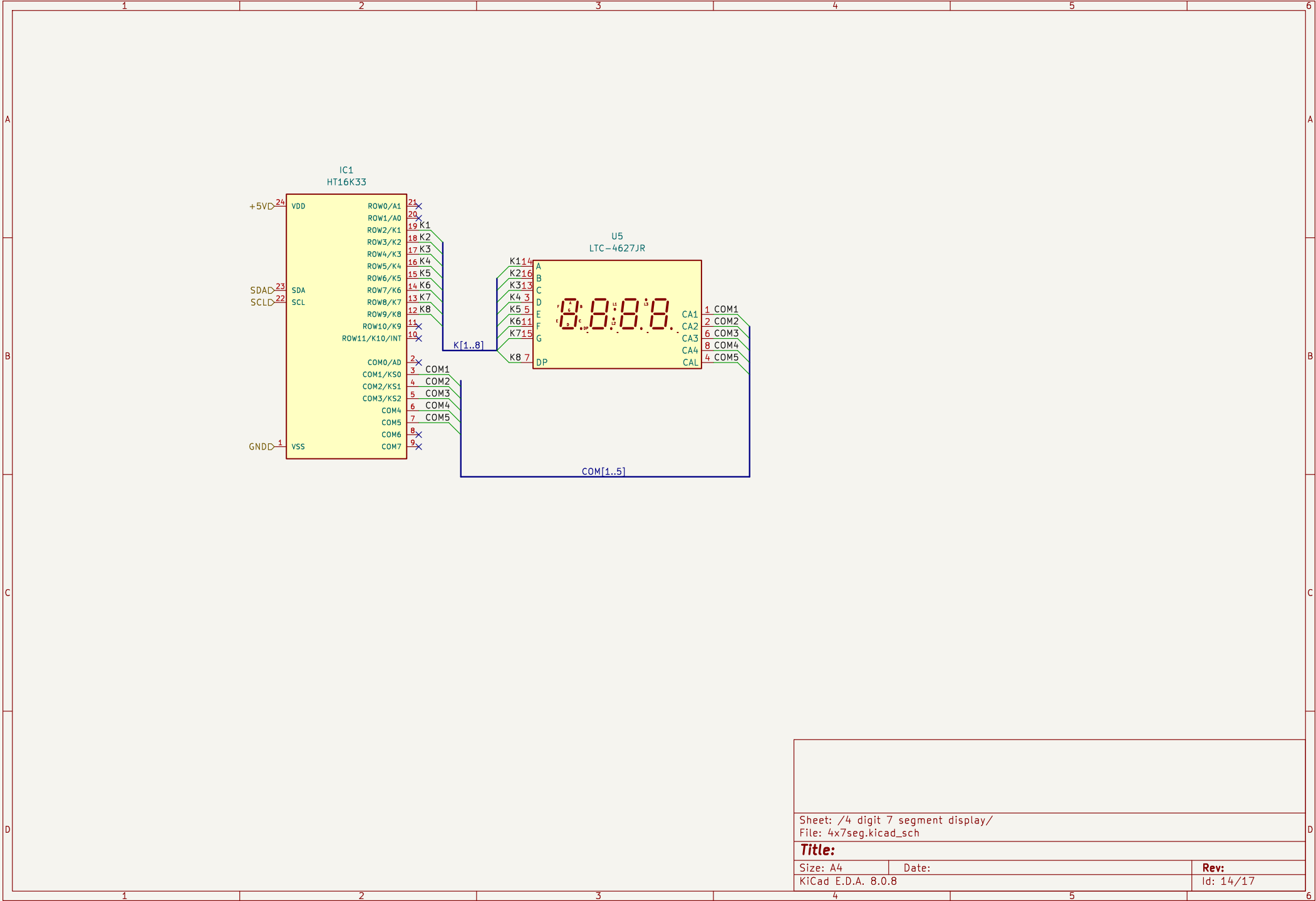
Sheet: /Button11/
File: button.kicad_sch

Title:

Size: A5
KiCad E.D.A. 8.0.8

Date:

Rev:
Id: 13/17



Sheet: /4 digit 7 segment display/
File: 4x7seg.kicad_sch

Title:

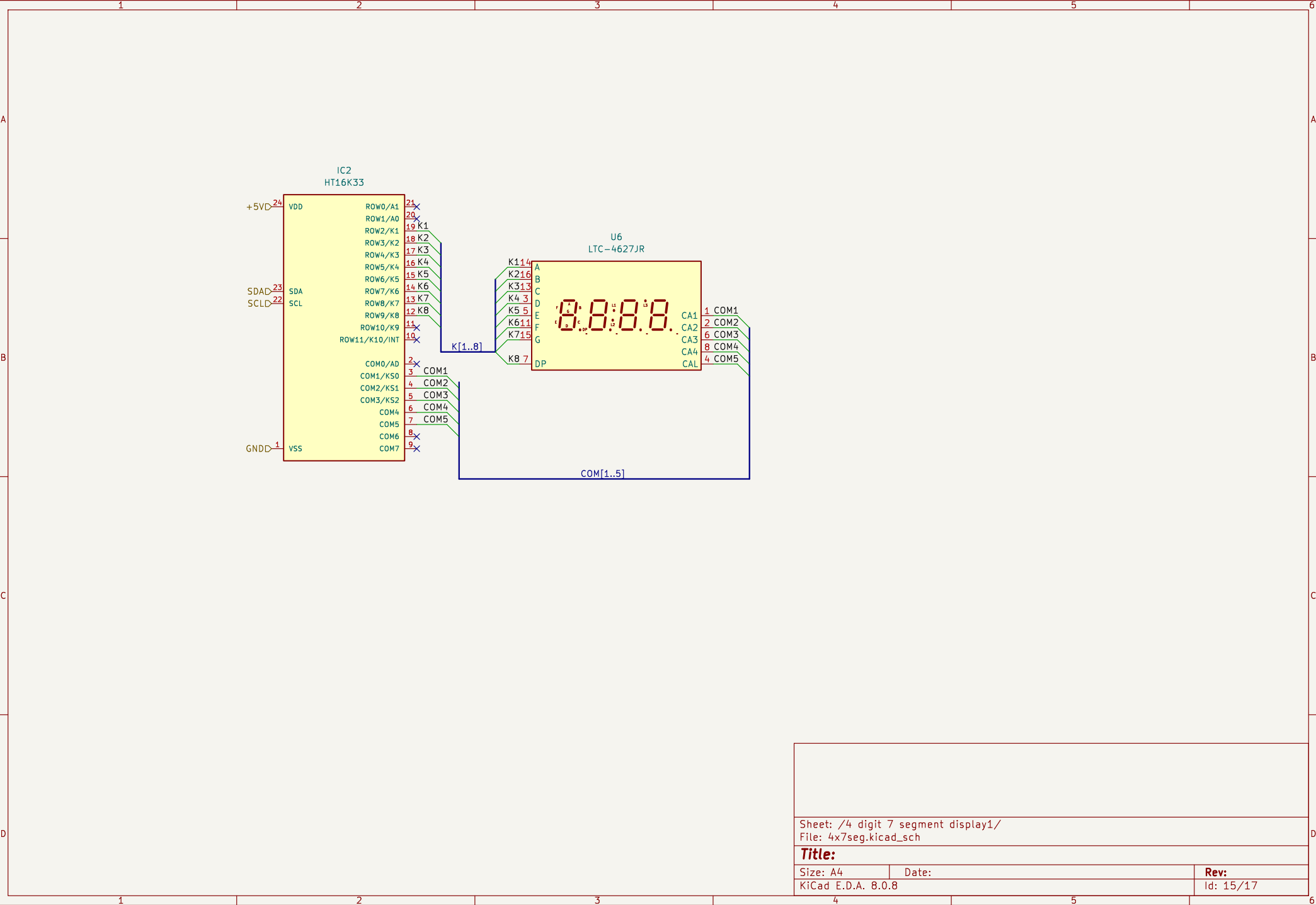
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Date:

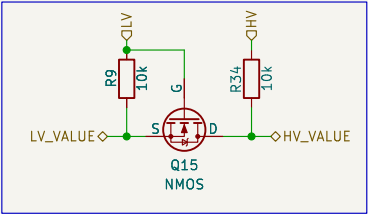
KiCad E.D.A. 8.0.8

Rev:

Id: 14/17



Copied from SparkFun's breakout board (thanks!)
http://cdn.sparkfun.com/datasheets/BreakoutBoards/Logic_Level_Bidirectional.pdf



Sheet: /Bidirectional logic level shifter/
File: level-shifter.kicad_sch

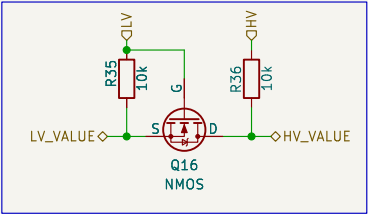
Title:

Size: A5
KiCad E.D.A. 8.0.8

Date:

Rev:
Id: 16/17

Copied from SparkFun's breakout board (thanks!)
http://cdn.sparkfun.com/datasheets/BreakoutBoards/Logic_Level_Bidirectional.pdf



Sheet: /Bidirectional logic level shifter1/
File: level-shifter.kicad_sch

Title:

Size: A5
KiCad E.D.A. 8.0.8

Date:

Rev:
Id: 17/17