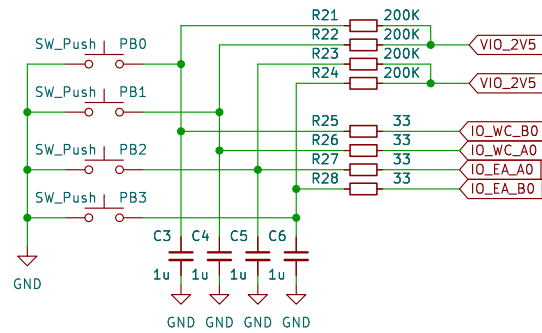


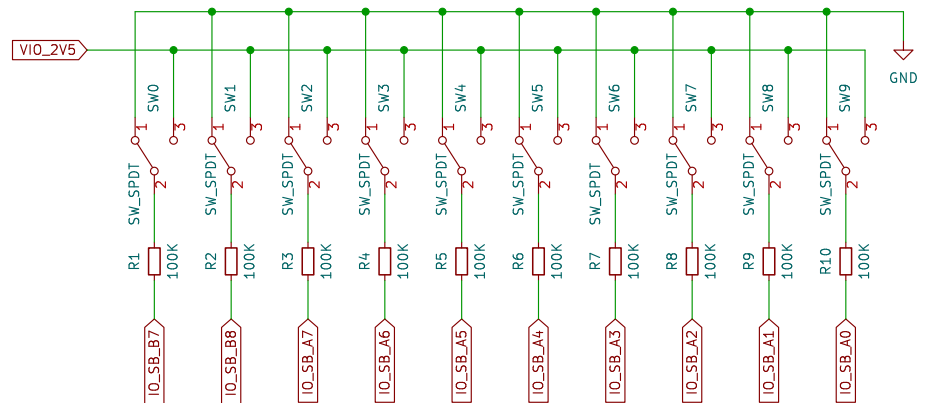
Push Buttons

4x push buttons with pull-up. Negative logic: press = 0.



Slide Switches

10x slide switches set GND / +3V3 level signals.
*IO_SB_A8 is skipped because it connects clock0 10MHz



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<https://github.com/fm4dd/gm-study-e1.git>

Sheet: /data-in/
File: data-in.kicad_sch

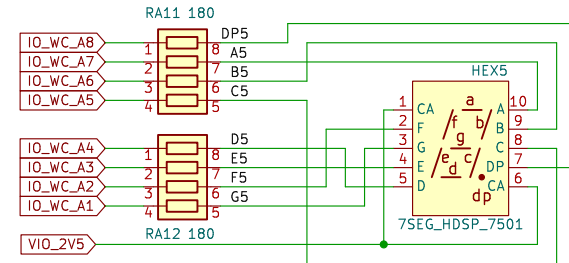
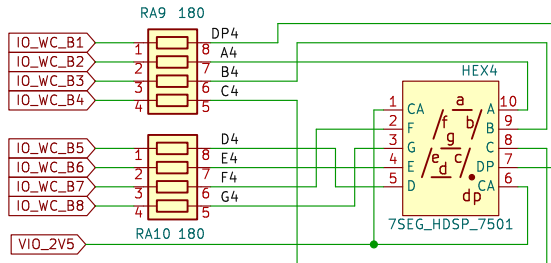
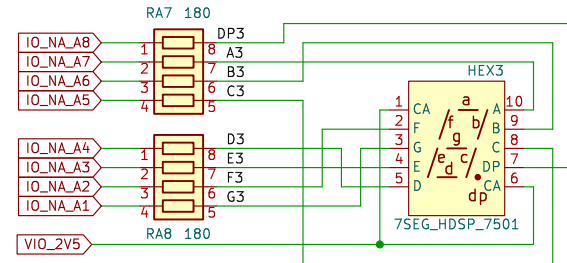
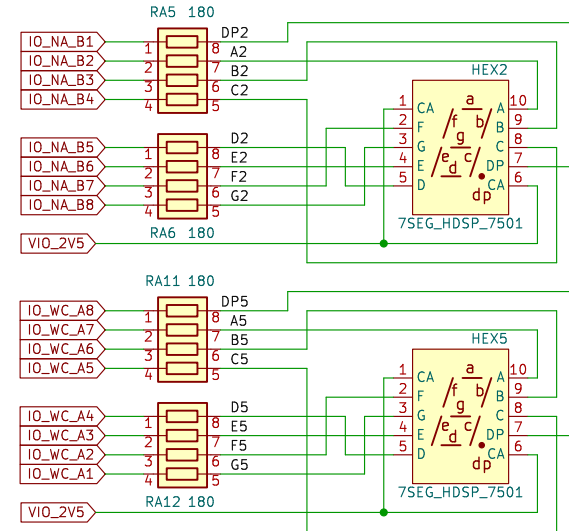
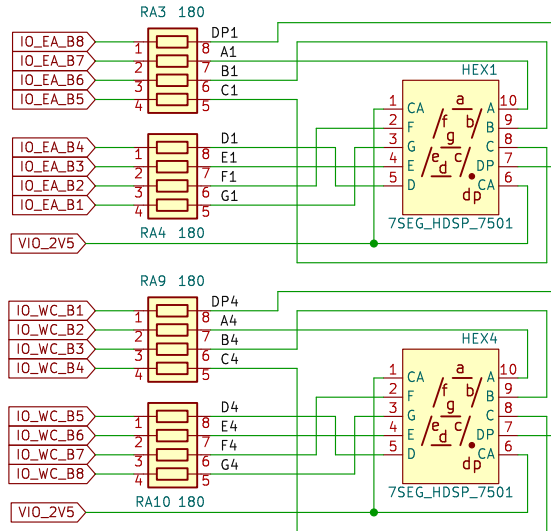
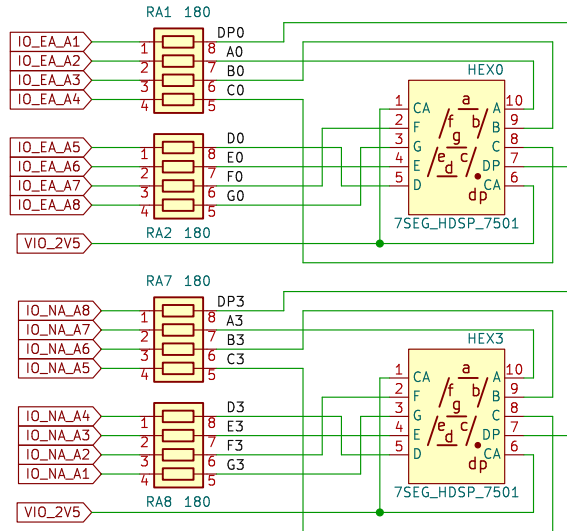
Title: GateMate E1 Study Board – Input Signals

Size: A4 Date: 2023-03-25
KiCad E.D.A. kicad (7.0.0)

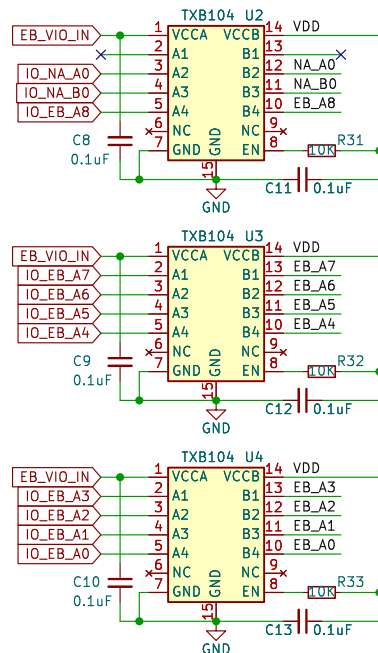
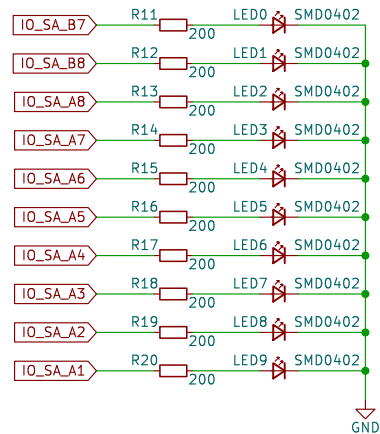
Rev:
Id: 2/3

7-Segment Display

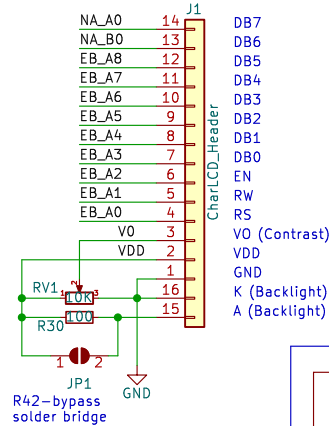
6 Digits, common anode, no multiplexing
Single-digit THT module 0.3" Broadcom HDSP-7501



10x LED Output

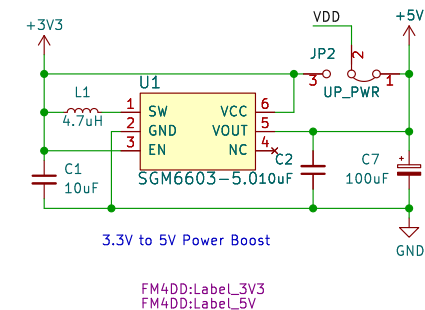


- 16-pin HD44780 charLCD connector pinout
- JP2 selects signal level 3.3V or 5V TTL
- R30 resistor regulates LCD backlight via pin 15
- bypass jumper JP1 routes VDD to pin 15
- RV1 potentiometer to adjust LCD contrast

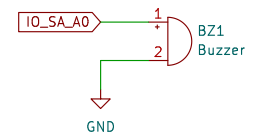


2.54mm IO Header

2.5V to 3.3V or 5V TTL signal level translation



Buzzer Output



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Sheet: /data-out/
File: data-out.kicad_sch

Title: GateMate E1 Study Board – Output Signals

Size: A4 Date: 2023-03-25
KiCad E.D.A. kicad (7.0.0)

Rev:
Id: 3/3