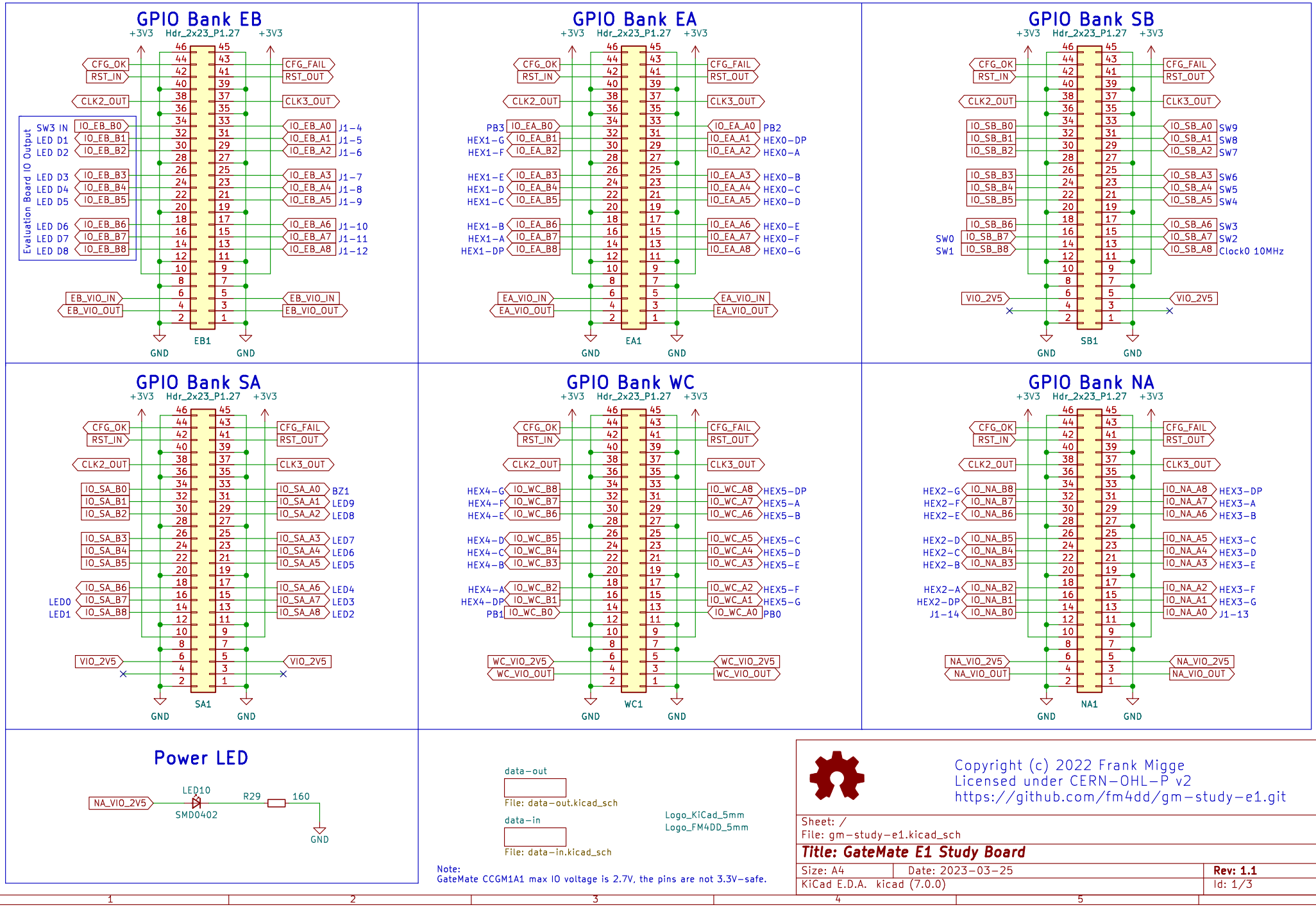
GPIO Bank EB
GPIO Bank EA
GPIO Bank SB
GPIO Bank SA
GPIO Bank WC
GPIO Bank NA
Power LED
Hdr_2x23_P1.27
Evaluation Board IO Output
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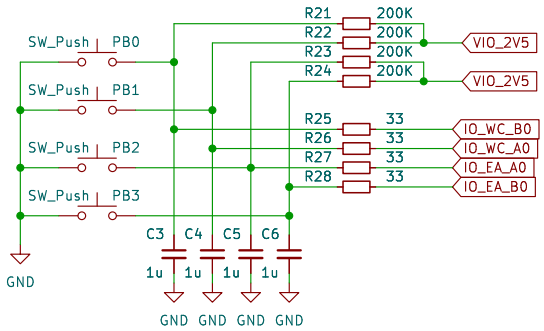
https://github.com/fm4dd/gm-study-e1.git
Sheet: /
File: gm-study-e1.kicad_sch
Title: GateMate E1 Study Board
Size: A4
Date: 2023-03-25
Rev: 1.1
KiCad E.D.A. kicad (7.0.0)
Id: 1/3
Note:
GateMate CCGM1A1 max IO voltage is 2.7V, the pins are not 3.3V-safe.

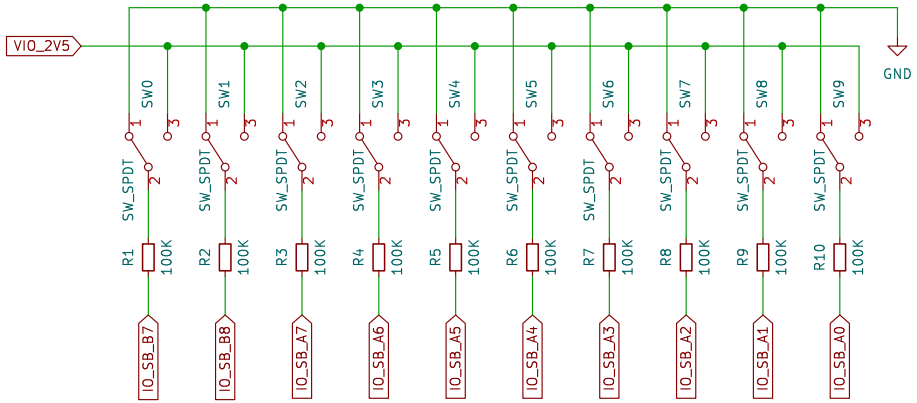
Push Buttons

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

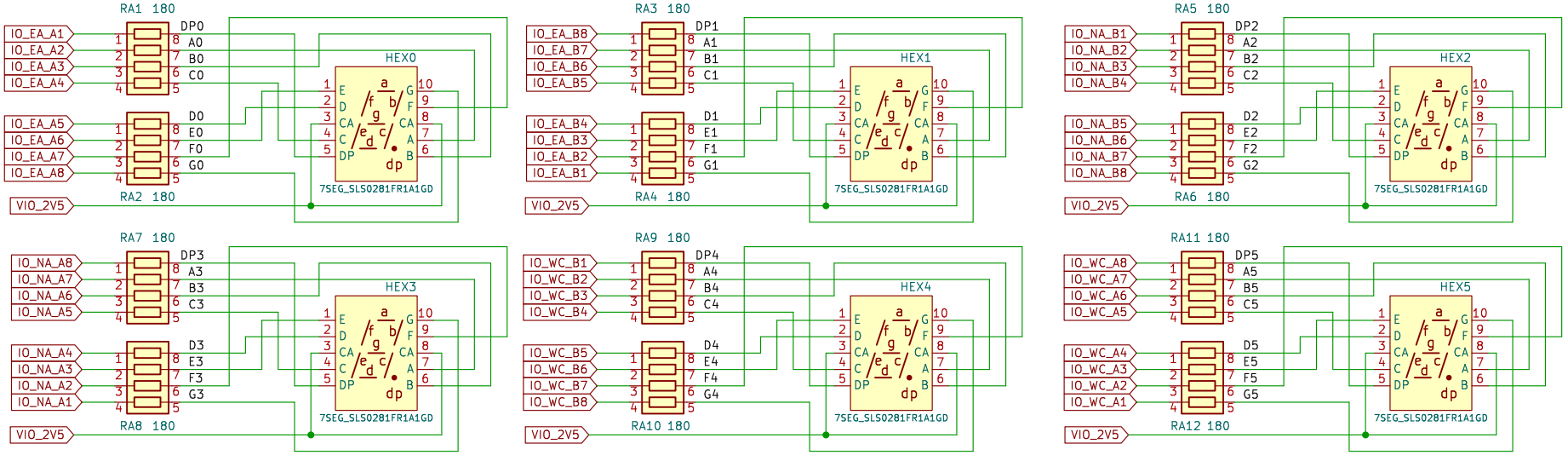
Sheet: /data-in/
File: data-in.kicad_sch

Title: GateMate E1 Study Board - Input Signals

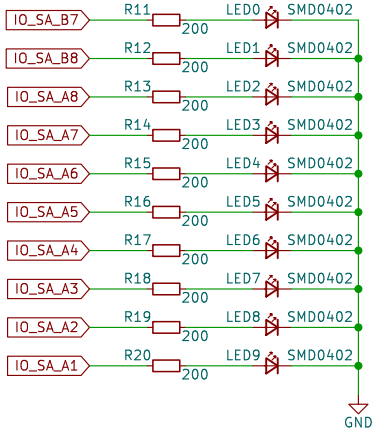
Size: A4	Date: 2023-03-26	Rev:
KiCad E.D.A. kicad (7.0.0)		Id: 2/3

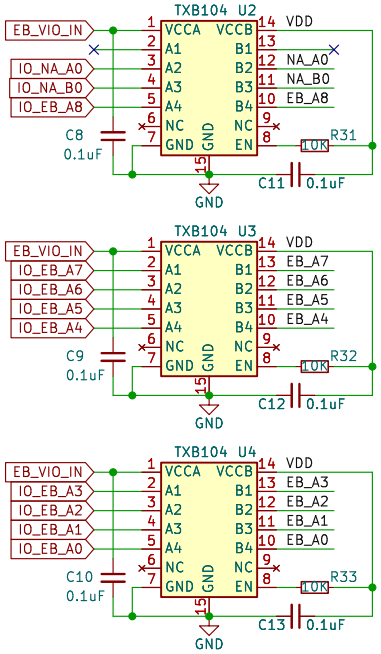
7-Segment Display

6 Digits, common anode, no mulitplexing
Single-digit SMD module 0.28" Sunlight SLS0281FR1A1GD

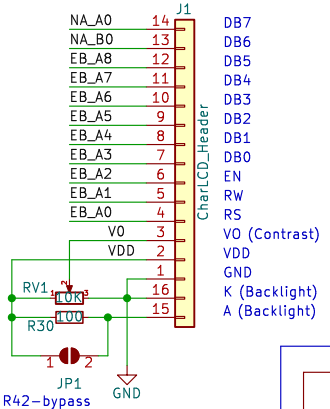


10x LED Output



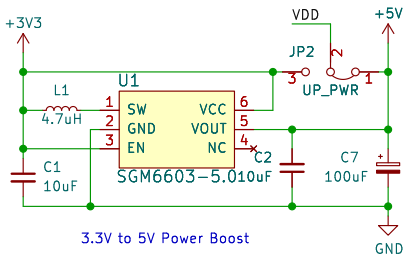


- 16-pin HD44780 charLCD connector pinout
- JP2 selects signal level 3.3V or 5V TTL
- R30 resistor regulates LCD backlight via pin 15
- bypass jumper JP1 routes VDD to pin 15
- RV1 potentiometer to adjust LCD contrast

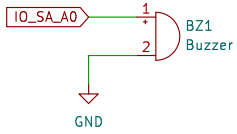


2.54mm IO Header

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



Buzzer Output



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

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

Title: GateMate E1 Study Board – Output Signals

Size: A4	Date: 2023-03-26	Rev:
KiCad E.D.A. kicad (7.0.0)		Id: 3/3