Project Changelog:
V4 - Increase capacitance of bulk capacitors, Change Sense Detector Resistor Value

Note:
A mix of 74HC (slower logic) and 74LVC (faster logic) was used. This was what I had available.

The currently used 74LVC parts are:
74LVC2G17 Dual Schmitt-Trigger Buffer
74LVC2G14 Dual Schmitt-Trigger Inverter

In the future, I would like to switch to all 74LVC series.
The currently used 74HC parts are:
74HC00 NAND gate used as a SR Latch
74HC00 NAND gate for some another logic
74HC138 3:8 Decoder with Active Low Outputs
74HC238 3:8 Decoder with Active High Outputs

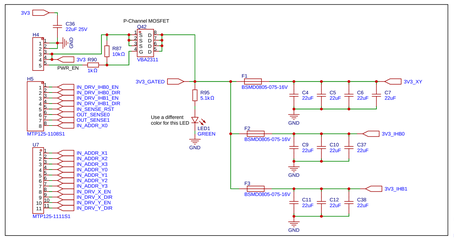
However, there seem to be no 74LVC238 variant.

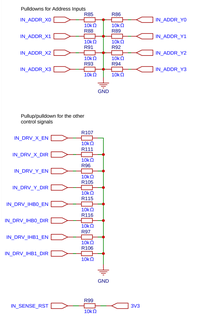
It might not be wise to directly replace the 74HC00 NAND gate used as a SR Latch.
Perhaps a 74LVC Series Schmitt-Trigger NAND Gate?

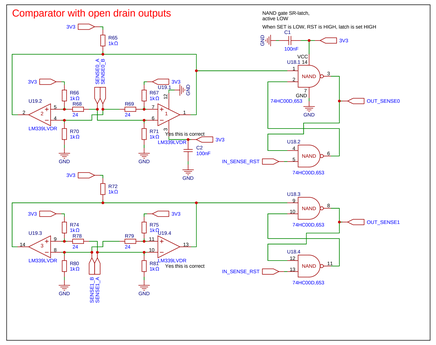
Note:
Power to the MOSFETS should only be enabled after some time,
to allow the output of the logic circuits to be in a known state

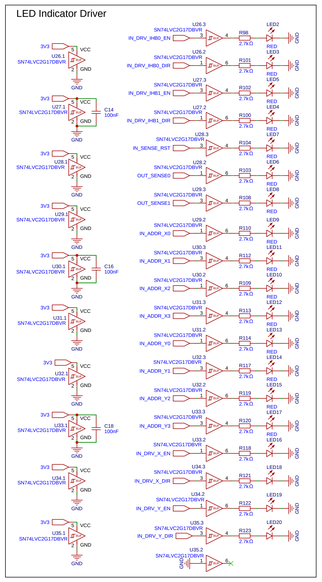
Note:
PTC Fuses with Hold Current of 750mA
(But they cause an undesirable voltage drop,
so extra capacitors are used)

Note:
In the current design, tuning the select current awkwardly
involves changing the supply voltage through external power supply.
So, room for improvement could be had here.
I used 10.0 ohm resistors but if you wanted 10.3 ohm, it would be hard to find.
So either vary the supply voltage precisely, so put another small value resistor in series.



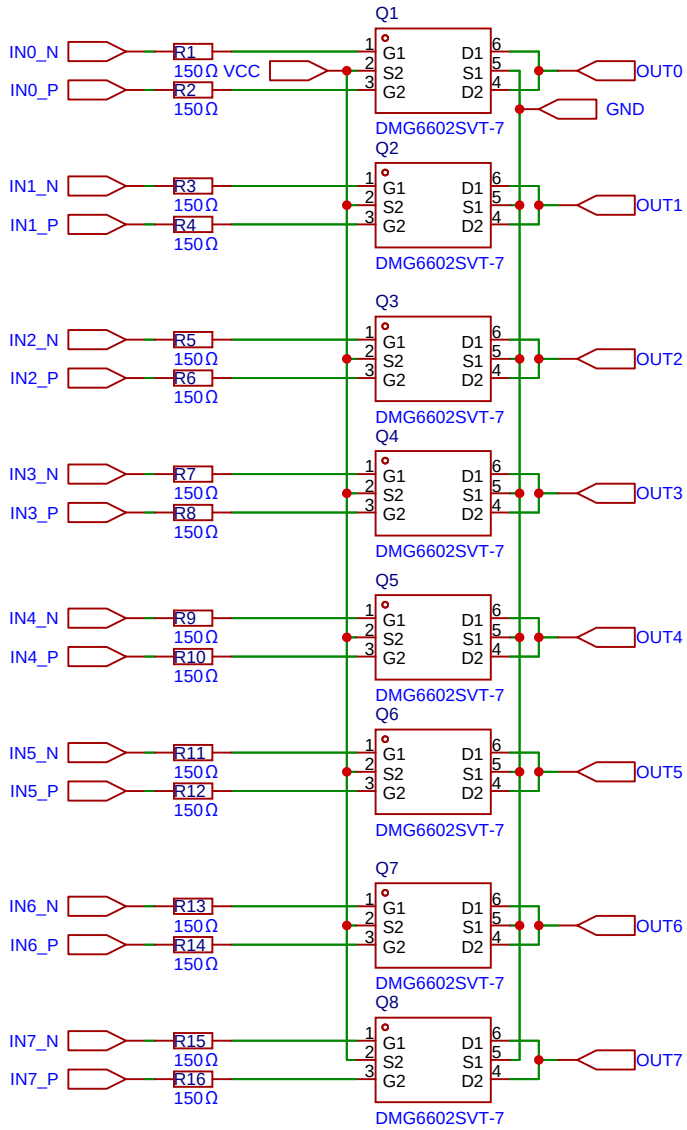






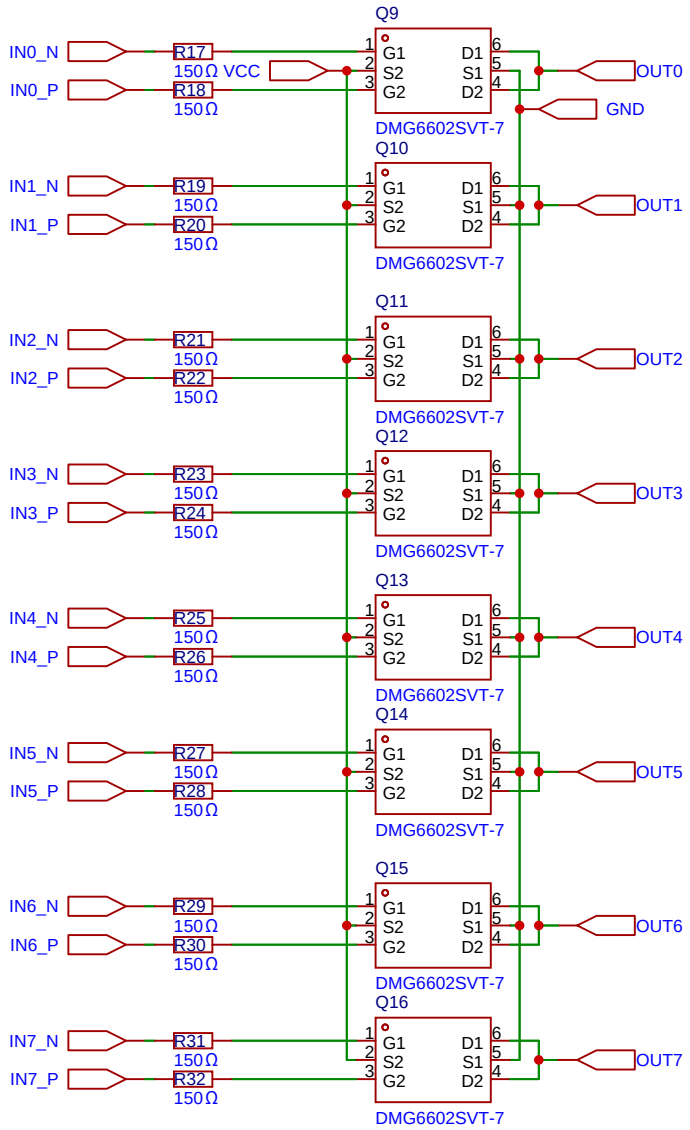
Schematic	Schematic1	Update Date	2025-07-10
		Create Date	2025-07-10
Page	P1	Part Number	JLCPCB-002
Drawn	EasyEDA	Retro Core 16x32 Motherboard V4	
Reviewed	EasyEDA		
		VER: V0.1	SIZE: A4
EasyEDA		PAGE: 1 OF 1	EasyEDA.com

Within each package:
1 is for N-Channel, 2 is for P-Channel



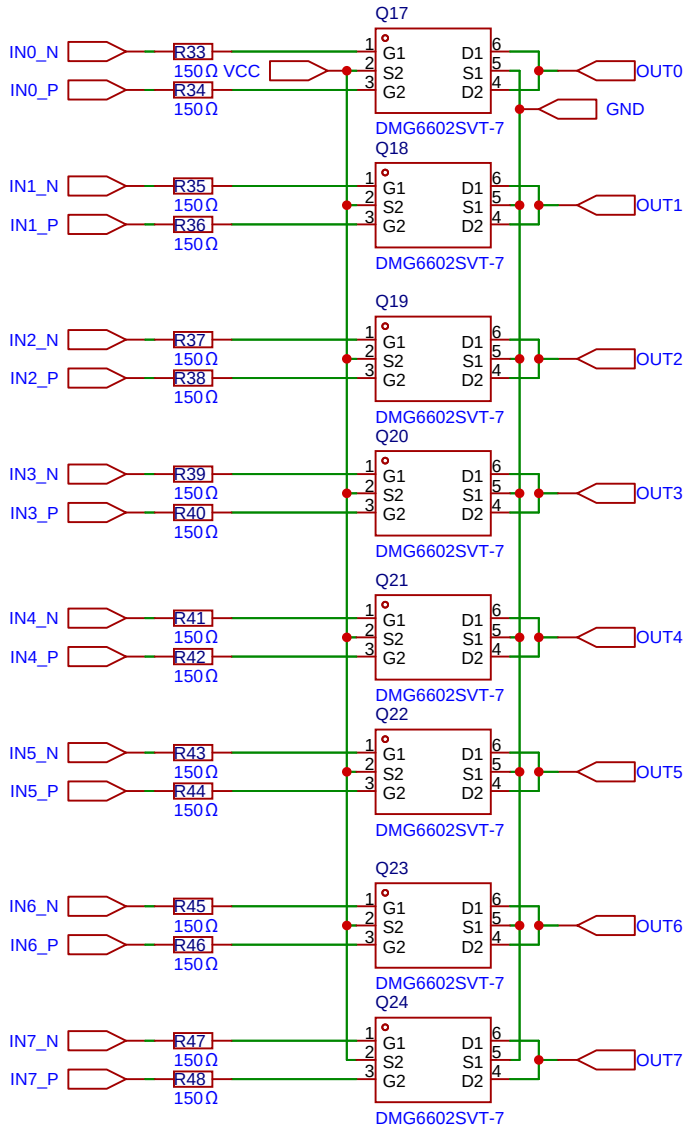
Schematic	Core Memory Line Driver Block v2	Update Date	2025-07-10
		Create Date	2025-07-10
Page	P1	Part Number	JLCPCB-002
Drawn	EasyEDA	Retro Core 16x32 Motherboard V4	
Reviewed	EasyEDA		
		VER	SIZE	PAGE 1 OF 1
EasyEDA		V0.1	A4	EasyEDA.com

Within each package:
1 is for N-Channel, 2 is for P-Channel



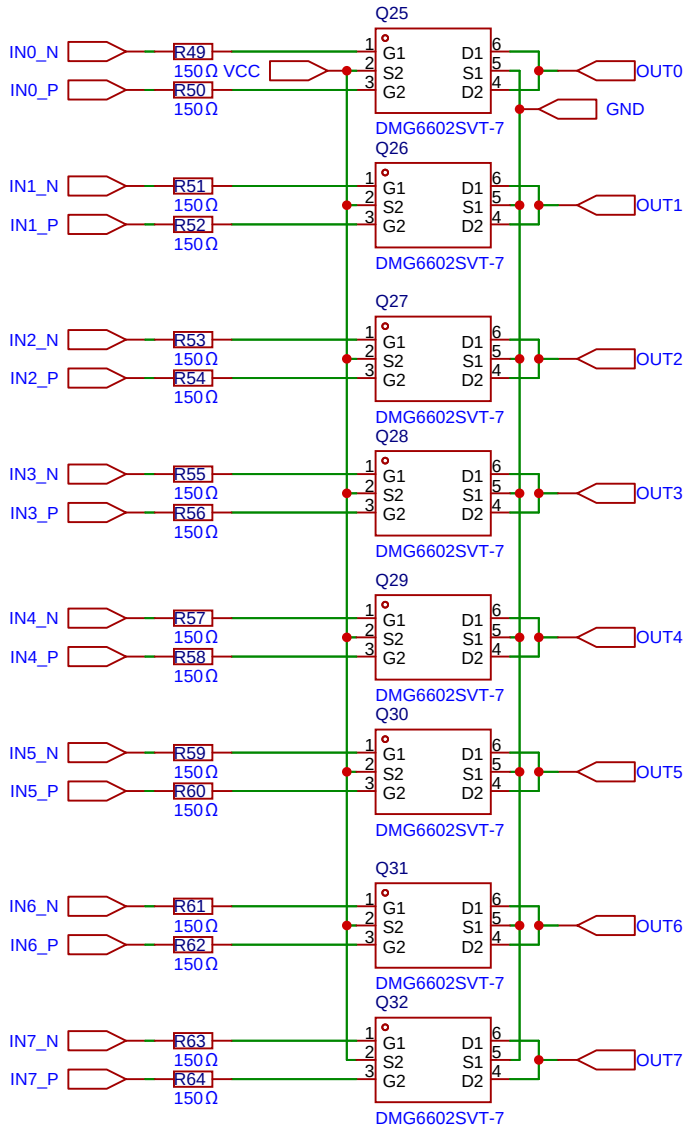
Schematic	Core Memory Line Driver Block v2	Update Date	2025-07-10
		Create Date	2025-07-10
Page	P1	Part Number	JLCPCB-002
Drawn	EasyEDA	Retro Core 16x32 Motherboard V4	
Reviewed	EasyEDA		
		VER	SIZE	PAGE 1 OF 1
EasyEDA		V0.1	A4	EasyEDA.com

Within each package:
1 is for N-Channel, 2 is for P-Channel



Schematic	Core Memory Line Driver Block v2	Update Date	2025-07-10
		Create Date	2025-07-10
Page	P1	Part Number	JLCPCB-002
Drawn	EasyEDA	Retro Core 16x32 Motherboard V4	
Reviewed	EasyEDA		
		VER	SIZE	PAGE 1 OF 1
EasyEDA		V0.1	A4	EasyEDA.com

Within each package:
1 is for N-Channel, 2 is for P-Channel



Schematic	Core Memory Line Driver Block v2	Update Date	2025-07-10
		Create Date	2025-07-10
Page	P1	Part Number	JLCPCB-002
Drawn	EasyEDA	Retro Core 16x32 Motherboard V4	
Reviewed	EasyEDA		
		VER	SIZE	PAGE 1 OF 1
EasyEDA		V0.1	A4	EasyEDA.com