{COMMON_BUS}

P1 SNES_Cartridge

GND	5	GND	36
A11	6	A11	37	A12
A10	7	A10	38	A13
A9	8	A9	39	A14
A8	9	A8	40	A15
A7	10	A7	41	BA0
A6	11	A6	42	BA1
A5	12	A5	43	BA2
A4	13	A4	44	BA3
A3	14	A3	45	BA4
A2	15	A2	46	BA5
A1	16	A1	47	BA6
A0	17	A0	48	BA7

C1 22u

+5V

GND

ROMSEL

U8L1A 74LS139

1	E	O3	7
2	A0	O2	6
	A1	O1	5
		O0	4

ROMSEL_LO
A15

U8L1B
15	E	O3	9
14	A0	O2	10
13	A1	O1	11
		O0	12

RAM.CE_LO
BA5
BA6

U8H1A 74LS139
3	A1	O0	4
2	A0	O1	5
		O2	6
1	E	O3	7

A13
A14
A15

U8H1B
15	E	O3	9
14	A0	O2	10
13	A1	O1	11
		O0	12

RAM.CE_HI
BA5
BA6

SJ1
HIROM
NO RAM
SJ2
LOROM

ROM.OE

File: ROM.kicad_sch

LOROM
SJ3
HIROM

RAM.CE

RAM.CE_MAD

File: RAM.kicad_sch

U6L1 MAD-1
+5V +BATT	7	VBAT	VOUT	5	+VSW
	6	VDD	ROMce1	16
RESET	9	RESET	ROMce2	1
			ROMce	4
	10	MAP		
ROMSEL	11	ROMSEL	RAMce	2
A15	15	A15L/13H		
BA4	14	A20L/14H	AUXce	3
BA5	13	A21LH/23X		
BA6	12	A22L/15H		
	8	GND		

C6L1 0.1u
+5V
GND
GND

U2A1 PIC12F629
CIC.D1	7	GP0	VDD	1	+5V
CIC.D0	6	GP1	GP3	4	IRQ
CIC.RST	5	GP2	GP4	3
	8	VSS	GP5	2	CIC.CLK

C2 0.1u
GND
C2 0.1u
GND
+5V

U8L1C 74LS139
| 16 | VCC |
| 8 | GND |

C8L1 0.1u
C8H1 0.1u

U8H1C 74LS139
| 16 | VCC |
| 8 | GND |

GND

U2B1 PIC12F629
CIC.D1	7	GP0	VDD	1	+5V
CIC.D0	6	GP1	GP3	4	IRQ
CIC.RST	5	GP2	GP4	3
	8	VSS	GP5	2	CIC.CLK

GND

U6H1 MAD-1
+5V +BATT	7	VBAT	VOUT	5	+VSW
	6	VDD	ROMce1	16
RESET	9	RESET	ROMce2	1
			ROMce	4
	10	MAP		
ROMSEL	11	ROMSEL	RAMce	2
A13	15	A15L/13H		
A14	14	A20L/14H	AUXce	3
BA5	13	A21LH/23X		
BA6	12	A22L/15H		
	8	GND		

C6H1 0.1u
+5V
GND

U2C1
CIC.D0	1	D0	VDD	16	CIC
CIC.RST	7	RST	D1	2	CIC.D1
	3	NC	CLK	6	CIC.CLK
	5	NC	NC	9
			NC	10
			NC	11
			NC	12
	4	KEY/LOCK	NC	13
			NC	14
	8	VSS	NC	15

GND
GND

+5V
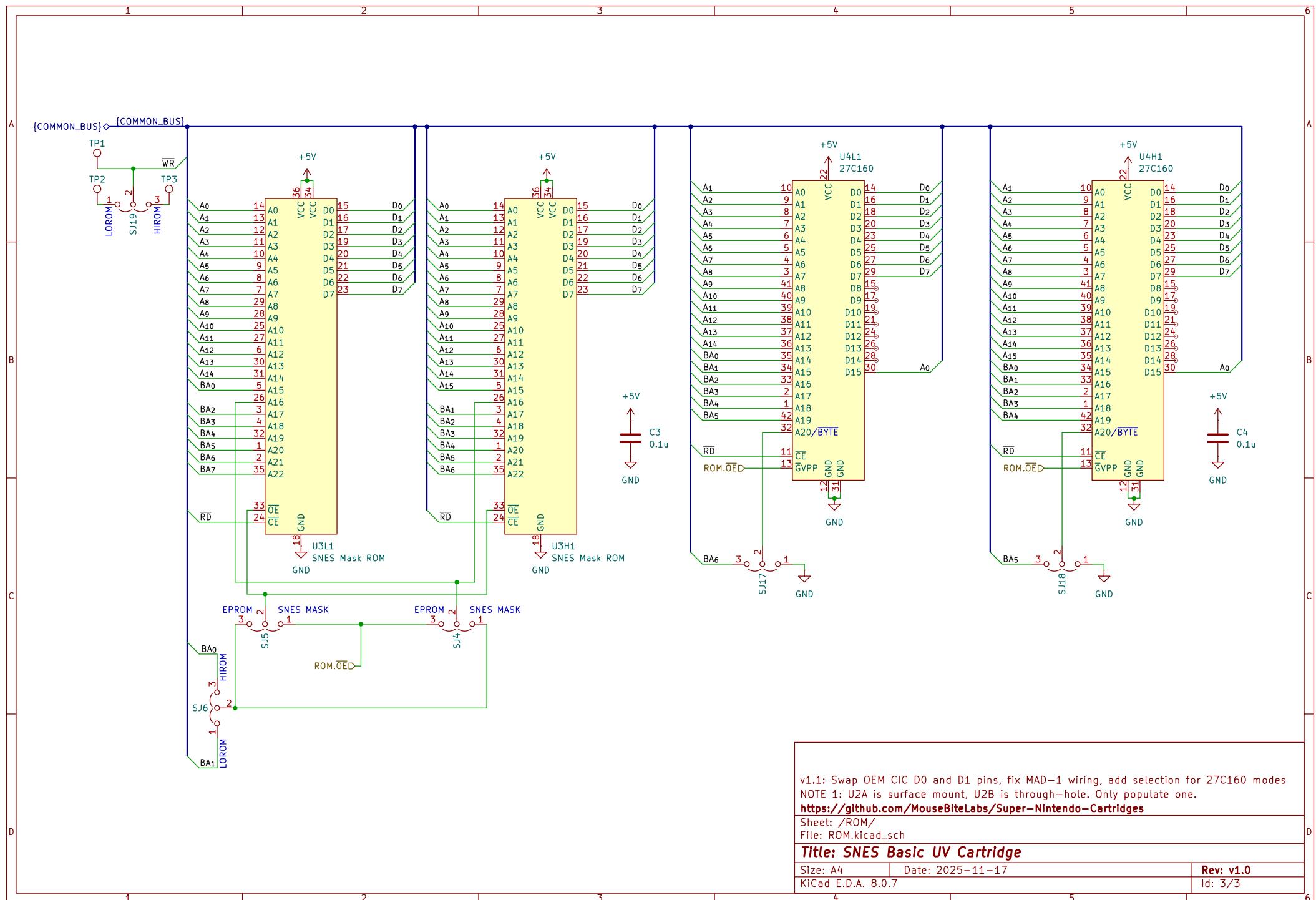D1
+VSW
R1 1k
+BATT
D2
B1
GND

v1.1: Swap OEM CIC D0 and D1 pins, fix MAD-1 wiring, add selection for 27C160 modes
NOTE 1: U2A is surface mount, U2B is through-hole. Only populate one.
https://github.com/MouseBiteLabs/Super-Nintendo-Cartridges
Sheet: /
File: SNES_Basic_UV_1-1.kicad_sch
Title: SNES Basic UV Cartridge
Size: A4 | Date: 2025-11-17 | **Rev: v1.0**
KiCad E.D.A. 8.0.7 | | Id: 1/3

+VSW

R7
10k

$\overline{RESET}$

R6
100k

Q2
2N3904

GND

+5V

D3

R3
10k

+VSW

R4
10k

$\overline{CE}_{SRAM}$

$\overline{RESET}$

R2
100k

Q1A1

Q1B1

R5
10k

+5V

GND

RAM.$\overline{CE}$

RAM.$\overline{CE}_{MAD}$

{COMMON_BUS}

+VSW

U5
AS6C1008

A0	12		13	Q0	D0
A1	11		14	Q1	D1
A2	10		15	Q2	D2
A3	9		17	Q3	D3
A4	8		18	Q4	D4
A5	7		19	Q5	D5
A6	6		20	Q6	D6
A7	5		21	Q7	D7
A8	27				
A9	26		22	$\overline{CS}$	$\overline{CE}_{SRAM}$
A10	23		30	CS2	+VSW

VCC 32

RA11 25 A11
RA12 4   A12
RA13 28 A13
RA14 3   A14
RA15 31 A15
RA16 2   A16

24 $\overline{OE}$ $\overline{RD}$
29 $\overline{WE}$ $\overline{WR}$

NC 1

GND 16

GND

SJ11
LOROM
SJ7
HIROM
SJ12
GND
LOROM
SJ8
HIROM
+VSW
SJ13
GND
LOROM
SJ9
HIROM
SJ14
GND
LOROM
SJ10
HIROM
SJ15
GND
LOROM
SJ16
HIROM
GND

+VSW

C5
0.1u

CB1
22u

GND

A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A14
BA0
BA1
BA2
BA3

v1.1: Swap OEM CIC D0 and D1 pins, fix MAD-1 wiring, add selection for 27C160 modes
NOTE 1: U2A is surface mount, U2B is through-hole. Only populate one.
https://github.com/MouseBiteLabs/Super-Nintendo-Cartridges

Sheet: /RAM/
File: RAM.kicad_sch

Title: SNES Basic UV Cartridge

| Size: A4 | Date: 2025-11-17 | **Rev: v1.0** |
| KiCad E.D.A. 8.0.7 | | Id: 2/3 |

SNES Basic UV Cartridge schematic — Sheet: /ROM/, File: ROM.kicad_sch

Components shown: U3L1 SNES Mask ROM, U3H1 SNES Mask ROM, U4L1 27C160, U4H1 27C160, capacitors C3 0.1u, C4 0.1u, solder jumpers SJ4, SJ5, SJ6, SJ17, SJ18, SJ19, test points TP1, TP2, TP3.

{COMMON_BUS}

v1.1: Swap OEM CIC D0 and D1 pins, fix MAD-1 wiring, add selection for 27C160 modes
NOTE 1: U2A is surface mount, U2B is through-hole. Only populate one.
https://github.com/MouseBiteLabs/Super-Nintendo-Cartridges

Sheet: /ROM/
File: ROM.kicad_sch

Title: SNES Basic UV Cartridge

Size: A4   Date: 2025-11-17   Rev: v1.0
KiCad E.D.A. 8.0.7   Id: 3/3