

SNES S-PPU2 Pinout by [Jonathon W. Donaldson \(jwdonal\)](#) (special thanks to [Martin Korth \(nocash\)](#))

Designator	Name	Desc	QFP100P1870X2470-64AM	Type	Owner	Show	Number	Name
1	B\ R\S T \	Video Output Color Burst Strobe (Active-Low) (to-S-ENC)	1	Output	1	True	True	B\ R\S T\
2	P\E D\ 3.58M	Unknown (NC)	2	Passive	1	True	True	P\E D\ 3.58M
3		Video Output Clock (3.58MHz) (NTSC) (to S-ENC)	3	Output	1	True	True	
4	T\O\U M\ E\	Unknown (NC)	4	Passive	1	True	True	T\O\U M\E\
5	VCC	Supply	5	Power	1	True	True	VCC
6	P\A W R\ P\A R D\ D7 D6 D5 D4 D3 D2 D1 D0	5A22 B-Bus Write Strobe (Active-Low)	6	Input	1	True	True	P\A W R\ P\A R D\ D7 D6 D5 D4 D3 D2 D1 D0
7		5A22 B-Bus Read Strobe (Active-Low)	7	Input	1	True	True	
8		5A22 Data Bus	8	I/O	1	True	True	D7
9		5A22 Data Bus	9	I/O	1	True	True	D6
10		5A22 Data Bus	10	I/O	1	True	True	D5
11		5A22 Data Bus	11	I/O	1	True	True	D4
12		5A22 Data Bus	12	I/O	1	True	True	D3
13		5A22 Data Bus	13	I/O	1	True	True	D2
14		5A22 Data Bus	14	I/O	1	True	True	D1
15		5A22 Data Bus	15	I/O	1	True	True	D0
16	GND	Supply	16	Power	1	True	True	GND
17	PA7	5A22 B-Bus Address	17	Input	1	True	True	PA7
18	PA6	5A22 B-Bus Address	18	Input	1	True	True	PA6
19	PA5	5A22 B-Bus Address	19	Input	1	True	True	PA5
20	PA4	5A22 B-Bus Address	20	Input	1	True	True	PA4
21	PA3	5A22 B-Bus Address	21	Input	1	True	True	PA3
22	PA2	5A22 B-Bus Address	22	Input	1	True	True	PA2
23	PA1	5A22 B-Bus Address	23	Input	1	True	True	PA1
24	PA0	5A22 B-Bus Address	24	Input	1	True	True	PA0
25	HBLANK	Horizontal Blank (to 5A22)	25	Output	1	True	True	HBLANK
26	VBLANK	Vertical Blank (to 5A22)	26	Output	1	True	True	VBLANK
27	5\M O U\ T\ T\	Dot Clock Out (5.37MHz) (to expansion port)	27	Passive	1	True	True	5\M O U\ T\ T\
28	R\E S O\ U T 1\ EXTLATCH H PALMOD E XIN VCC R\E S O\ U T 0\ R\E S E T\ \ GND FIELD O V E R 1\ \	Reset Out 1 (to CPU, APU, Cartridge, Expansion port, etc.)	28	Output	1	True	True	R\E S O\ U T 1\ EXTLATCH H PALMOD E XIN VCC R\E S O\ U T 0\ R\E S E T\ \ GND FIELD O V E R 1\ \
29		External Latch (Lightpen signal) (to Joypad)	29	I/O	1	True	True	
30		PAL Video Mode Enable (VCC=PAL, GND=NTSC) (GND)	30	Input	1	True	True	
31		Master Clock (21.47727MHz) (from Osc)	31	Input	1	True	True	
32	VCC	Supply	32	Power	1	True	True	VCC
33		Reset Out 0 (to PPU1)	33	Output	1	True	True	
34		Reset In (from CIC)	34	Input	1	True	True	
35		Supply	35	Power	1	True	True	
36		Unknown (connected to PPU1)	36	Passive	1	True	True	
37		Unknown (connected to PPU1)	37	Input	1	True	True	

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38	5\M\N\	Dot Clock In (5.37MHz) (from PPU1)	38	Passive	1	True	True	5\M\N\
39	H\C\L\D\	Unknown (connected to PPU1)	39	Passive	1	True	True	H\C\L\D\
40	V\C\L\D\	Unknown (connected to PPU1)	40	Passive	1	True	True	V\C\L\D\
41	COLOR0	Unknown (connected to PPU2)	41	Passive	1	True	True	COLOR0
42	COLOR1	Unknown (connected to PPU2)	42	Passive	1	True	True	COLOR1
43	COLOR2	Unknown (connected to PPU2)	43	Passive	1	True	True	COLOR2
44	PRI00	Unknown (connected to PPU2)	44	Passive	1	True	True	PRI00
45	PRI01	Unknown (connected to PPU2)	45	Passive	1	True	True	PRI01
46	CHR0	Unknown (connected to PPU2)	46	Passive	1	True	True	CHR0
47	CHR1	Unknown (connected to PPU2)	47	Passive	1	True	True	CHR1
48	CHR2	Unknown (connected to PPU2)	48	Passive	1	True	True	CHR2
49	CHR3	Unknown (connected to PPU2)	49	Passive	1	True	True	CHR3
50	O\V\E\R\2 \	Unknown (connected to local /OVER1, and /OVER on PPU1)	50	Input	1	True	True	O\V\E\R\2\
51	VDB0	VRAM Data Bus (High Byte)	51	I/O	1	True	True	VDB0
52	VDB1	VRAM Data Bus (High Byte)	52	I/O	1	True	True	VDB1
53	VDB2	VRAM Data Bus (High Byte)	53	I/O	1	True	True	VDB2
54	VDB3	VRAM Data Bus (High Byte)	54	I/O	1	True	True	VDB3
55	VDB4	VRAM Data Bus (High Byte)	55	I/O	1	True	True	VDB4
56	VDB5	VRAM Data Bus (High Byte)	56	I/O	1	True	True	VDB5
57	VDB6	VRAM Data Bus (High Byte)	57	I/O	1	True	True	VDB6
58	VDB7	VRAM Data Bus (High Byte)	58	I/O	1	True	True	VDB7
59	VCC	Supply	59	Power	1	True	True	VCC
60	VDA0	VRAM Data Bus (Low Byte)	60	I/O	1	True	True	VDA0
61	VDA1	VRAM Data Bus (Low Byte)	61	I/O	1	True	True	VDA1
62	VDA2	VRAM Data Bus (Low Byte)	62	I/O	1	True	True	VDA2
63	VDA3	VRAM Data Bus (Low Byte)	63	I/O	1	True	True	VDA3
64	VDA4	VRAM Data Bus (Low Byte)	64	I/O	1	True	True	VDA4
65	VDA5	VRAM Data Bus (Low Byte)	65	I/O	1	True	True	VDA5
66	VDA6	VRAM Data Bus (Low Byte)	66	I/O	1	True	True	VDA6

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67	VDA7	VRAM Data Bus (Low Byte)	67	I/O	1	True	True	VDA7
68	GND	Supply	68	Power	1	True	True	GND
69	EXT0	External Video Input (from VRAM Data Bus (High Byte)) (it is unclear why this is wired up to VRAM in SNES)	69	Input	1	True	True	EXT0
70	EXT1	External Video Input (from VRAM Data Bus (High Byte)) (it is unclear why this is wired up to VRAM in SNES)	70	Input	1	True	True	EXT1
71	EXT2	External Video Input (from VRAM Data Bus (High Byte)) (it is unclear why this is wired up to VRAM in SNES)	71	Input	1	True	True	EXT2
72	EXT3	External Video Input (from VRAM Data Bus (High Byte)) (it is unclear why this is wired up to VRAM in SNES)	72	Input	1	True	True	EXT3
73	EXT4	External Video Input (from VRAM Data Bus (High Byte)) (it is unclear why this is wired up to VRAM in SNES)	73	Input	1	True	True	EXT4
74	EXT5	External Video Input (from VRAM Data Bus (High Byte)) (it is unclear why this is wired up to VRAM in SNES)	74	Input	1	True	True	EXT5
75	EXT6	External Video Input (from VRAM Data Bus (High Byte)) (it is unclear why this is wired up to VRAM in SNES)	75	Input	1	True	True	EXT6
76	EXT7	External Video Input (from VRAM Data Bus (High Byte)) (it is unclear why this is wired up to VRAM in SNES)	76	Input	1	True	True	EXT7
77	TST0	Unknown (NC)	77	Passive	1	True	True	TST0
78	TST1	Unknown (NC)	78	Passive	1	True	True	TST1
79	TST2	Unknown (NC)	79	Passive	1	True	True	TST2
80	TST3	Unknown (NC)	80	Passive	1	True	True	TST3
81	TST4	Unknown (NC)	81	Passive	1	True	True	TST4
82	TST5	Unknown (NC)	82	Passive	1	True	True	TST5
83	VCC	Supply	83	Power	1	True	True	VCC
84	TST6	Unknown (NC)	84	Passive	1	True	True	TST6
85	TST7	Unknown (NC)	85	Passive	1	True	True	TST7
86	TST8	Unknown (NC)	86	Passive	1	True	True	TST8
87	TST9	Unknown (NC)	87	Passive	1	True	True	TST9
88	TST10	Unknown (NC)	88	Passive	1	True	True	TST10
89	TST11	Unknown (NC)	89	Passive	1	True	True	TST11
90	TST12	Unknown (NC)	90	Input	1	True	True	TST12
91	TST13	Unknown (NC)	91	Input	1	True	True	TST13

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92	TST14	Unknown (NC)	92	Input	1	True	True	TST14
93	TST15	Unknown (NC)	93	Input	1	True	True	TST15
94	AVCC	Supply	94	Passive	1	True	True	AVCC
95	R	Analog Red Component (to S-ENC)	95	Output	1	True	True	R
96	G	Analog Green Component (to S-ENC)	96	Output	1	True	True	G
97	B	Analog Blue Component (to S-ENC)	97	Output	1	True	True	B
98	HVCMODE	Home Video Computer (a.k.a. Famicom) Mode (purpose unknown since SNES can play Famicom games already) (GND)	98	Input	1	True	True	HVCMODE
99	GND	Supply	99	Power	1	True	True	GND
100	C\S\Y\N\C\	Video Output Composite Sync (Active-Low) (to S-ENC)	100	Output	1	True	True	C\S\Y\N\C\