

Binary dump of the 82S123A (74S188) PROM contents

IC1: address	progr. Byte	6502 processor selected address space	Control function description
0 1	61 61	0x0xxx	Simulate an external address of 0x2xxx
2	43	0x80xx, 0x82xx, 0x84xx, ...	Simulate an external address of 0xA0xx, 0xA2xx, ..., enable the internal ROM (range 0x2000 to 0x2fff), switch the address bits A[0..3] to the internal AL address bus, switch the internal 4-Bit register output to the internal AH address bus and store the current AL address bus value (A[0..3])
3	107	0x81xx, 0x83xx, 0x85xx, ...	Simulate an external address of 0xA1xx, 0xA3xx, ..., enable the internal ROM (range 0x2000 to 0x2fff), switch the address bits A[4..7] to the internal AL address bus, switch the internal 4-Bit register output to the internal AH address bus and store the current AL address bus value (A[4..7])
4 5	61 61	0x4xxx	Simulate an external address of 0x6xxx
6 7	60 60	0xCxxx	
8 9	61 61	0x2xxx	
10 11	53 53	0xAxxx	Enable the internal RAM (range 0x0000 to 0x0fff)
12 13	61 61	0x6xxx	
14 15	13 13	0xExxx	Enable the internal ROM (range 0x0000 to 0x0fff)
16 17	61 61	0x1xxx	Simulate an external address of 0x3xxx
18 19	45 45	0x9xxx	Simulate an external address of 0xBxxx and enable the internal ROM (range 0x3000 to 0x3fff),
20 21	61 61	0x5xxx	Simulate an external address of 0x7xxx
22 23	60 60	0xDxxx	
24 25	61 61	0x3xxx	
26 27	53 53	0xBxxx	Enable the internal RAM (range 0x1000 to 0x1fff)
28 29	61 61	0x7xxx	
30	13	0xF0xx, 0xF2xx, 0xF4xx, ...	Enable the internal ROM (range 0x1000 to 0x1fff)
31	141	0xF1xx, 0xF3xx, 0xF5xx, ...	Enable the internal ROM (range 0x1000 to 0x1fff) and store the values of the address lines A1 and A2 to the internal clock mode Flip-Flops

Function oriented listing of the 82S123A (74S188) PROM contents

Line label	6502 processor selected address space					6502 programmed byte (dez)	FETCH-2MHZ-MODE		O1&O8-Function	ROM-/OE			O4..O6-Function	SELECT-A[0..3][4..7]->AL			O2-, O3-, O7-Function
	IC1-Addr	A15	A14	A13	A12		A8	O8		O1	O5	O6		O4	O7	O3	
0	0	0	0	0	0	0	0	1	1	1	1	0	1	0	AL=A[0..3] AH=A[4..7]		
1	0	0	0	0	0	1	0	1	1	1	1	0	1	0			
16	0	0	0	1	0	61	0	1	1	1	1	0	1	0			
17	0	0	0	1	1	61	0	1	1	1	1	0	1	0			
8	0	0	1	0	0	61	0	1	1	1	1	0	1	0			
9	0	0	1	0	1	61	0	1	1	1	1	0	1	0			
24	0	0	1	1	0	61	0	1	1	1	1	0	1	0			
25	0	0	1	1	1	61	0	1	1	1	1	0	1	0			
4	0	1	0	0	0	61	0	1	1	1	1	0	1	0			
5	0	1	0	0	1	61	0	1	1	1	1	0	1	0			
20	0	1	0	1	0	61	0	1	1	1	1	0	1	0			
21	0	1	0	1	1	61	0	1	1	1	1	0	1	0			
12	0	1	1	0	0	61	0	1	1	1	1	0	1	0			
13	0	1	1	0	1	61	0	1	1	1	1	0	1	0			
28	0	1	1	1	0	61	0	1	1	1	1	0	1	0			
29	0	1	1	1	1	61	0	1	1	1	1	0	1	0			
2	1	0	0	0	0	43	0	1	0	1	1	Enable HI-ROM (GCR-Tables)	0	0	1	AL=A[0..3], AH=AL(prev.)	
3	1	0	0	0	1	107	0	1	0	1	1	Enable HI-ROM (Prof-DOS-Ext.)	1	0	1	AL=A[4..7], AH=AL(prev.)	
18	1	0	0	1	0	45	0	1	0	1	1	Enable RAM (O4=0, O6=1)	0	1	0	AL=A[0..3]	
19	1	0	0	1	1	45	0	1	0	1	1	Enable RAM (O4=0, O6=1)	0	1	0	AH=A[4..7]	
10	1	0	1	0	0	53	0	1	1	1	0	Enable LO-ROM	0	1	0	AL=A[0..3]	
11	1	0	1	0	1	53	0	1	1	1	0	Enable LO-ROM	0	1	0	AH=A[4..7]	
26	1	0	1	1	0	53	0	1	1	1	0	Enable LO-ROM	0	1	0	AL=A[0..3]	
27	1	0	1	1	1	53	0	1	1	1	0	Enable LO-ROM (Profess.-DOS)	0	1	0	AH=A[4..7]	
6	1	1	0	0	0	60	0	0	1	1	1	Enable LO-ROM	0	1	0	AL=A[0..3]	
7	1	1	0	0	1	60	0	0	1	1	1	Enable LO-ROM	0	1	0	AH=A[4..7]	
22	1	1	0	1	0	60	0	0	1	1	1	Enable LO-ROM	0	1	0	AL=A[0..3]	
23	1	1	0	1	1	60	0	0	1	1	1	Enable LO-ROM	0	1	0	AH=A[4..7]	
14	1	1	1	0	0	13	0	1	0	0	1	Enable LO-ROM	0	1	0	AL=A[0..3]	
15	1	1	1	0	1	13	0	1	0	0	1	Enable LO-ROM	0	1	0	AH=A[4..7]	
30	1	1	1	1	0	13	0	1	0	0	1	Enable LO-ROM	0	1	0	AL=A[0..3]	
31	1	1	1	1	1	141	1	1	0	0	1	Enable LO-ROM (Profess.-DOS)	0	1	0	AH=A[4..7]	