Binary dump of the 82S123A (74S188) PROM contents (Professional-DOS Release)

IC1: address	progr. Byte	6502 prozessor selected address space	Control function description
0 1	28 29	0x0xxx	
2 3	28 29	0x8xxx	
4	53	0x40xx..0x47xx	Enable internal RAM (range 0x0000 to 0x07ff) and simulate an external address of 0x48xx..0x4Fxx
5	53	0x48xx..0x4Fxx	Enable internal RAM (range 0x0800 to 0x0fff)
6 7	28 29	0xCxxx	
8 9	28 29	0x2xxx	
10 11	28 29	0xAxxx	**Empty address space**, because of the removed external default DOS ROM and missing enabling of the internal one
12	13	0x60xx..0x67xx	Enable the internal ROM (range 0x0800 to 0x0fff) and simulate an external address of 0x68xx..0x6Fxx
13	141	0x68xx..0x6Fxx	Enable the internal ROM (range 0x0000 to 0x07ff) and store the values of the address lines A1 and A2 to the internal clock mode Flip-Flops
14 15	44 45	0xExxx	Enable the internal ROM (range 0x2000 to 0x2fff)
16	52	0x10xx..0x17xx	Enable internal RAM (range 0x1000 to 0x17ff) as **additional mirror** from 0x5000
17	29	0x18xx..0x1Fxx	
18 19	28 29	0x9xxx	
20	52	0x50xx..0x57xx	Enable internal RAM (range 0x1000 to 0x17ff)
21	52	0x58xx..0x5Fxx	Enable internal RAM (range 0x1800 to 0x1fff) and simulate an external address of 0x50xx..0x57xx
22 23	28 29	0xDxxx	
24 25	28 29	0x3xxx	
26 27	28 29	0xBxxx	**Empty address space**, because of the removed external default DOS ROM and missing enabling of the internal one
28	10	0x70xx..0x77xx	Enable the internal ROM (range 0x1000 to 0x17ff), 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])
29	74	0x78xx..0x7Fxx	Enable the internal ROM (range 0x1800 to 0x1fff), simulate an external address of 0x70xx..0x77xx, 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])
30 31	44 45	0xFxxx	Enable the internal ROM (range 0x3000 to 0x3fff)

Function oriented listing of the 82S123A (74S188) PROM contents (Professional-DOS Release)

Line label	A15	A14	A13	A12	A11	6502 prozessor selected address space	programmed byte (dez)	FETCH-2MHZ-MODE	A11-EXT (6502 adaptor)	O1&O8-Function	ROM-/OE	ROM-BANKSEL	RAM-/CS1	O4..O6-Function	SELECT-A[0..3|4..7]->AL	/EN-AL->AH (Latched)	/EN-A[4..7]->AH	O2-, O3-, O7-Function
IC1-Addr	A1	A2	A3	A4	A0			O8	O1		O5	O6	O4		O7	O3	O2	
0	0	0	0	0	0	0x0xxx	28	0	0		1	0	1		0	1	0	
1	0	0	0	0	1		29	0	1		1	0	1		0	1	0	
16	0	0	0	1	0	0x10xx..0x17xx	52	0	0		1	1	0	RAM-Mirror (0x50xx..0x57xx)	0	1	0	
17	0	0	0	1	1	0x18xx..0x1Fxx	29	0	1		1	0	1		0	1	0	AL=A[0..3]
8	0	0	1	0	0	0x2xxx	28	0	0		1	0	1		0	1	0	AH=A[4..7]
9	0	0	1	0	1		29	0	1		1	0	1		0	1	0	
24	0	0	1	1	0	0x3xxx	28	0	0		1	0	1		0	1	0	
25	0	0	1	1	1		29	0	1		1	0	1		0	1	0	
4	0	1	0	0	0	0x40xx..0x47xx	53	0	1	A-EXT: 0x48xx..0x4Fxx	1	1	0		0	1	0	
5	0	1	0	0	1	0x48xx..0x4Fxx	53	0	1		1	1	0	Enable RAM	0	1	0	AL=A[0..3]
20	0	1	0	1	0	0x50xx..0x57xx	52	0	0		1	1	0		0	1	0	AH=A[4..7]
21	0	1	0	1	1	0x58xx..0x5Fxx	52	0	0	A-EXT: 0x50xx..0x57xx	1	1	0		0	1	0	
12	0	1	1	0	0	0x60xx..0x67xx	13	0	1	A-EXT: 0x68xx..0x6Fxx	0	0	1	Enable LO-ROM	0	1	0	AL=A[0..3]
13	0	1	1	0	1	0x68xx..0x6Fxx	141	1	1	Fetch-2MHz-Mode	0	0	1	(DOS-Extension)	0	1	0	AH=A[4..7]
28	0	1	1	1	0	0x70xx..0x77xx	10	0	0		0	0	1	Enable LO-ROM	0	0	1	AL=A[0..3], AH=AL(prev.)
29	0	1	1	1	1	0x78xx..0x7Fxx	74	0	0	A-EXT: 0x70xx..0x77xx	0	0	1	(GCR-Conversion-Tables)	1	0	1	AL=A[4..7], AH=AL(prev.)
2	1	0	0	0	0	0x8xxx	28	0	0		1	0	1		0	1	0	
3	1	0	0	0	1		29	0	1		1	0	1		0	1	0	
18	1	0	0	1	0	0x9xxx	28	0	0		1	0	1		0	1	0	
19	1	0	0	1	1		29	0	1		1	0	1		0	1	0	
10	1	0	1	0	0	0xAxxx	28	0	0		1	0	1	Empty address space (because of the removed default DOS ROM)	0	1	0	
11	1	0	1	0	1		29	0	1		1	0	1		0	1	0	
26	1	0	1	1	0	0xBxxx	28	0	0		1	0	1		0	1	0	
27	1	0	1	1	1		29	0	1		1	0	1		0	1	0	AL=A[0..3]
6	1	1	0	0	0	0xCxxx	28	0	0		1	0	1		0	1	0	AH=A[4..7]
7	1	1	0	0	1		29	0	1		1	0	1		0	1	0	
22	1	1	0	1	0	0xDxxx	28	0	0		1	0	1		0	1	0	
23	1	1	0	1	1		29	0	1		1	0	1		0	1	0	
14	1	1	1	0	0	0xExxx	44	0	0		0	1	1		0	1	0	
15	1	1	1	0	1		45	0	1		0	1	1	Enable HI-ROM	0	1	0	
30	1	1	1	1	0	0xFxxx	44	0	0		0	1	1	(Profess.-DOS)	0	1	0	
31	1	1	1	1	1		45	0	1		0	1	1		0	1	0	