

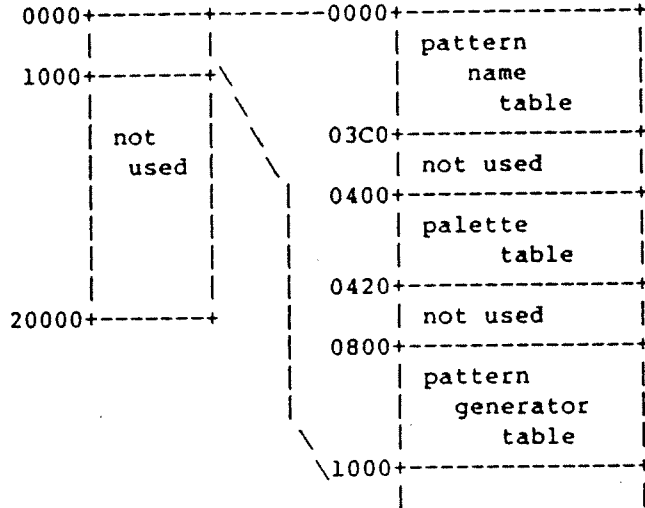
MSX-2 VIDEO RAM MEMORY MAP

6th, Jun. 1985 by ASCII Microsoft FEHQ

1. SCREEN 0 TEXT-1(40 characters) TEXT-2(80 characters)

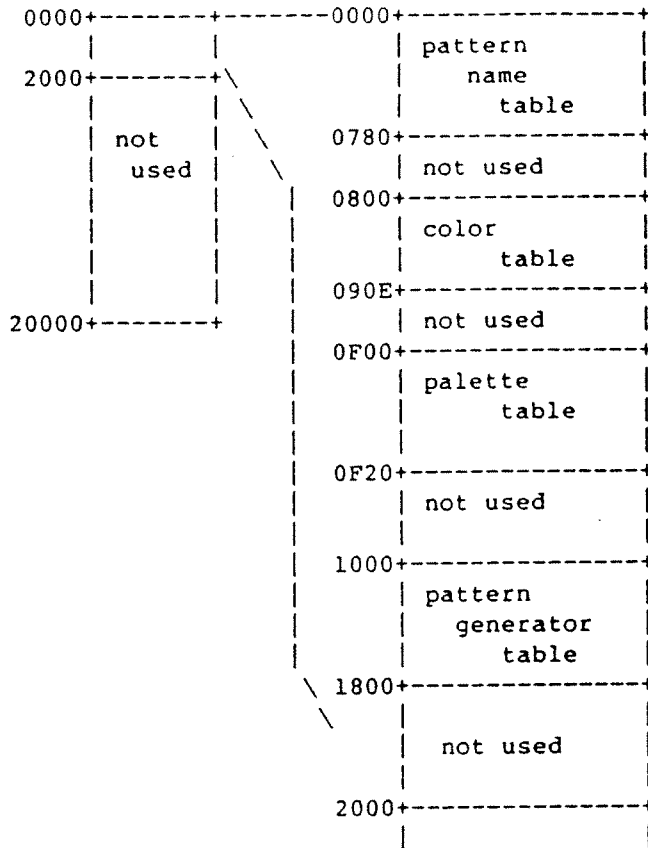
1.1 TEXT-1 (40 characters)

PATTERN NAME TABLE	0000H - 03BFH	960 bytes
PATTERN GENERATOR TABLE	0800H - 0FFFH	2048 bytes
PALETTE TABLE	0400H - 041FH	32 bytes



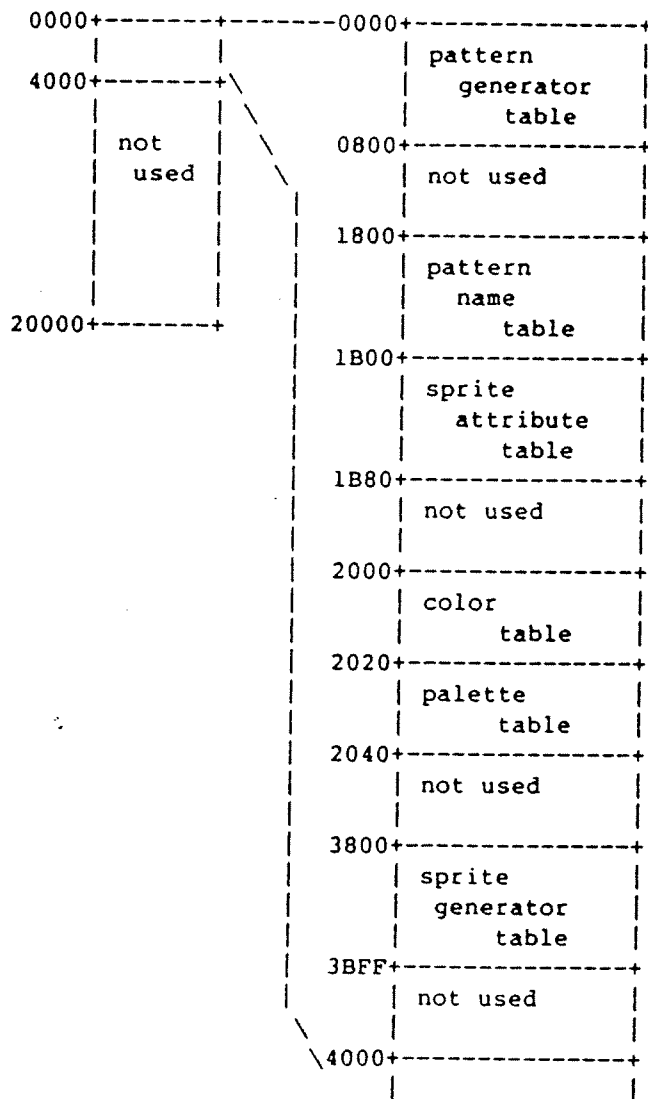
1. 2 TEXT-2 (80 characters)

PATTERN NAME TABLE	0000H - 077FH	1920 bytes
PATTERN GENERATOR TABLE	1000H - 17FFH	2048 bytes
COLOR TABLE	0800H - 090DH	270 bytes
PALETTE TABLE	0F00H - 0F1FH	32 bytes



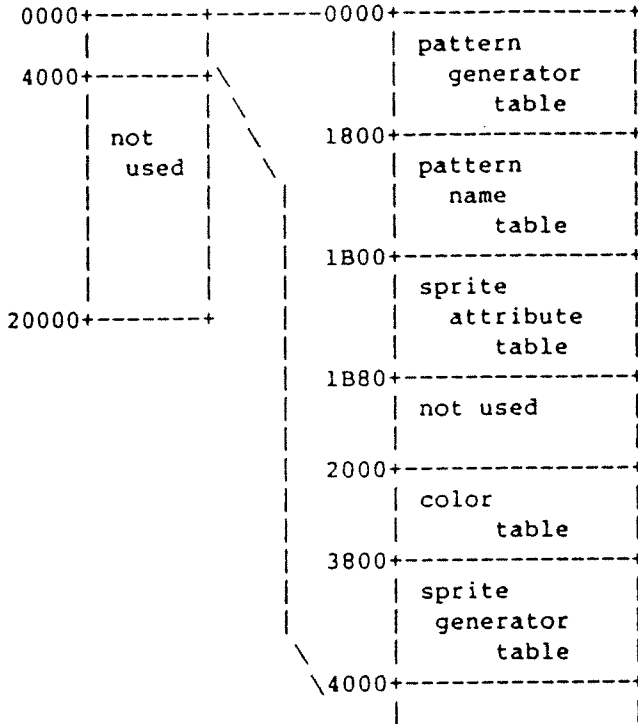
2. SCREEN 1 GRAPHIC-1 (32 characters)

PATTERN GENERATOR TABLE	0000H - 07FFH	2048 bytes
PATTERN NAME TABLE	1800H - 1AFFH	768 bytes
COLOR TABLE	2000H - 201FH	32 bytes
SPRITE ATTRIBUTE TABLE	1B00H - 1B7FH	128 bytes
SPRITE GENERATOR TABLE	3800H - 3FFFH	2048 bytes
PALETTE TABLE	2020H - 203FH	32 bytes



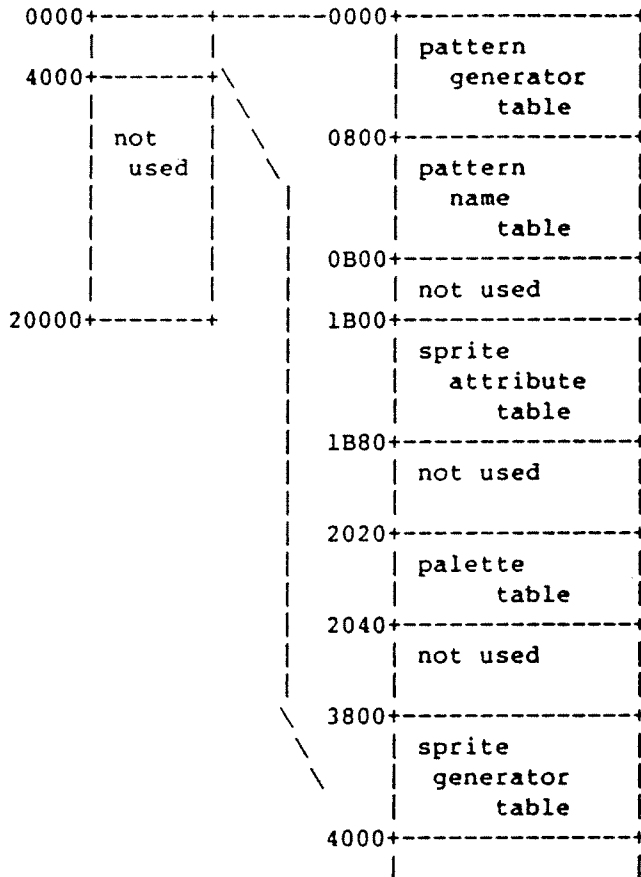
3. SCREEN 2 GRAPHIC-2 (256X192)

PATTERN GENERATOR TABLE	0000H - 17FFH	6144 bytes
PATTERN NAME TABLE	1800H - 1AFFH	768 bytes
COLOR TABLE	2000H - 37FFH	6144 bytes
SPRITE ATTRIBUTE TABLE	1B00H - 1B7FH	128 bytes
SPRITE GENERATOR TABLE	3800H - 3FFFH	2048 bytes
PALETTE TABLE	1B80H - 1B9FH	32 bytes



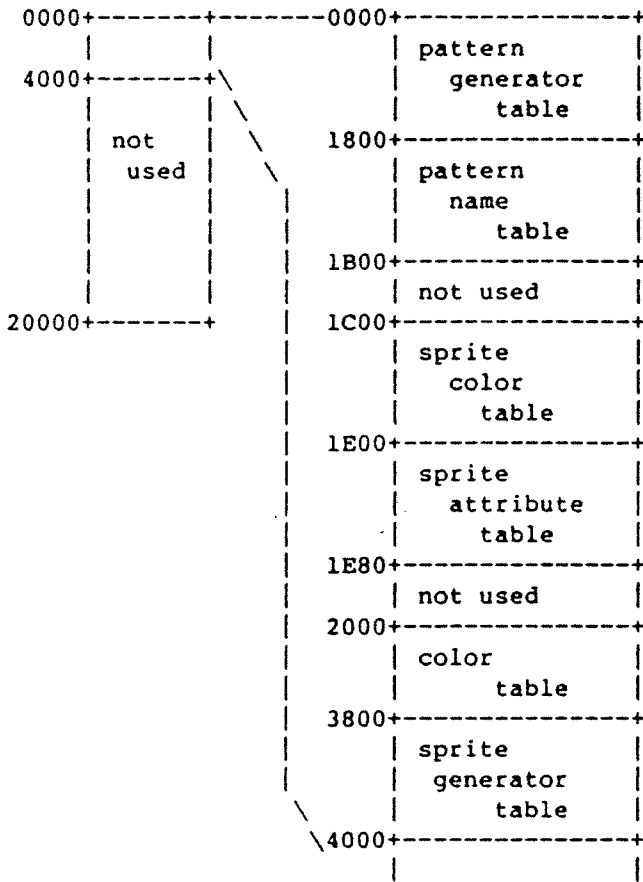
4. SCREEN 3 MULTI COLOR (64X48)

PATTERN GENERATOR TABLE	0000H - 07FFH	2048 bytes
PATTERN NAME TABLE	0800H - 0AFFH	768 bytes
SPRITE ATTRIBUTE TABLE	1B00H - 1B7FH	128 bytes
SPRITE GENERATOR TABLE	3800H - 3FFFH	2048 bytes
PALETTE TABLE	2020H - 203FH	32 bytes



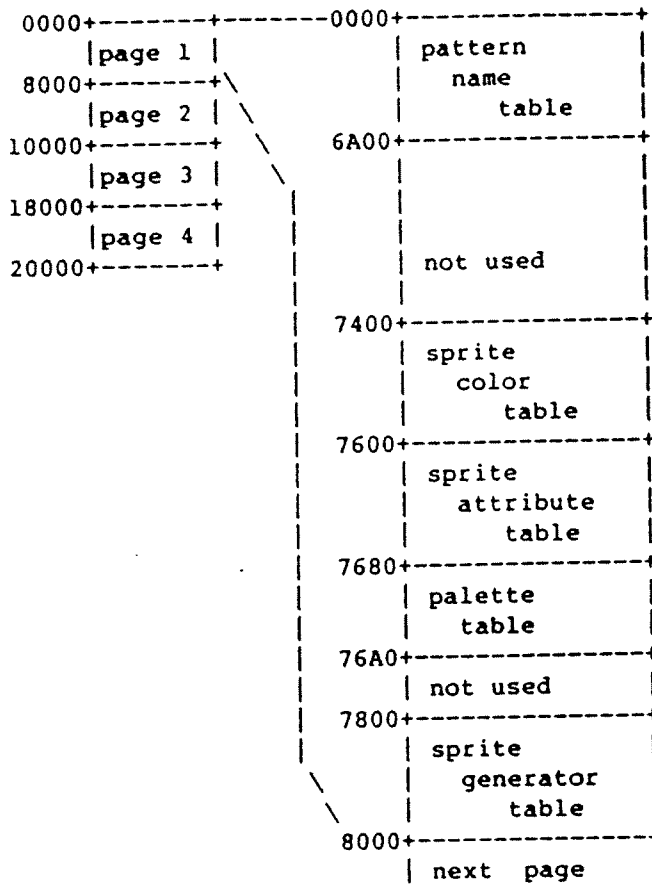
5. SCREEN 4 GRAPHIC-3 (256X192)

PATTERN GENERATOR TABLE	0000H - 17FFH	6144 bytes
PATTERN NAME TABLE	1800H - 1AFFH	768 bytes
COLOR TABLE	2000H - 37FFH	6144 bytes
SPRITE COLOR TABLE	1C00H - 1DFFH	512 bytes
SPRITE ATTRIBUTE TABLE	1E00H - 1E7FH	128 bytes
SPRITE GENERATOR TABLE	3800H - 3FFFH	2048 bytes
PALETTE TABLE	1E80H - 1E9FH	32 bytes



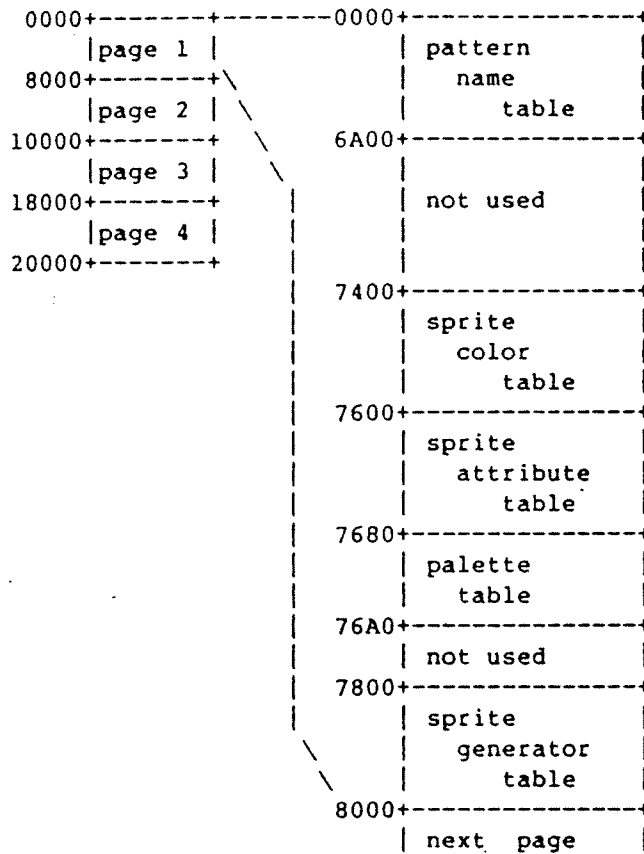
6. SCREEN 5 GRAPHIC-4 (256X212 bit map)

PATTERN NAME TABLE	0000H - 69FFH	27136 bytes
SPRITE COLOR TABLE	7400H - 75FFH	512 bytes
SPRITE ATTRIBUTE TABLE	7600H - 767FH	128 bytes
PALETTE TABLE	7680H - 769FH	32 bytes
SPRITE GENERATOR TABLE	7800H - 7FFFH	2048 bytes



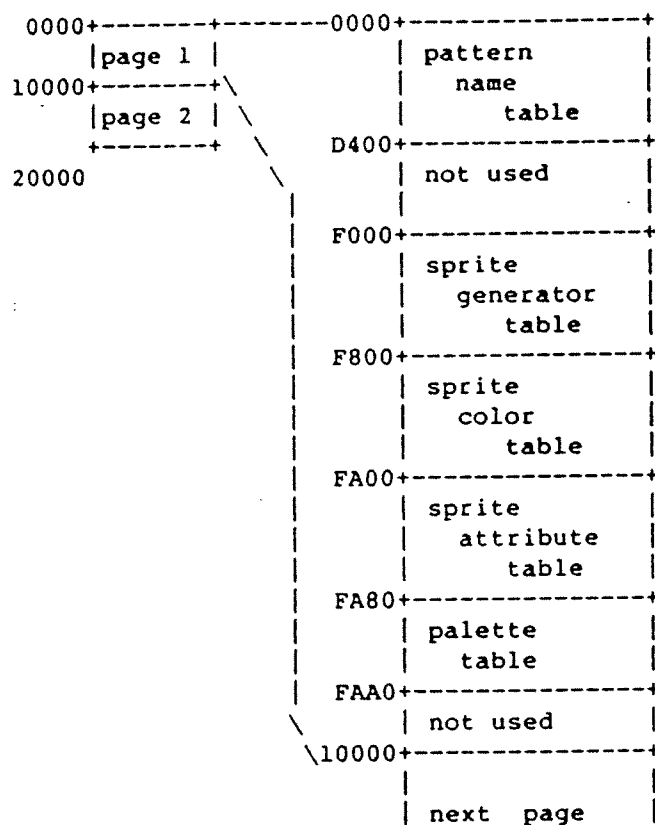
7. SCREEN 6 GRAPHIC-5 (512X212 bit map)

PATTERN NAME TABLE	0000H - 69FFH	27136 bytes
SPRITE COLOR TABLE	7400H - 74FFH	512 bytes
SPRITE ATTRIBUTE TABLE	7600H - 767FH	128 bytes
PALETTE TABLE	7680H - 769FH	32 bytes
SPRITE GENERATOR TABLE	7800H - 7FFFH	2048 bytes



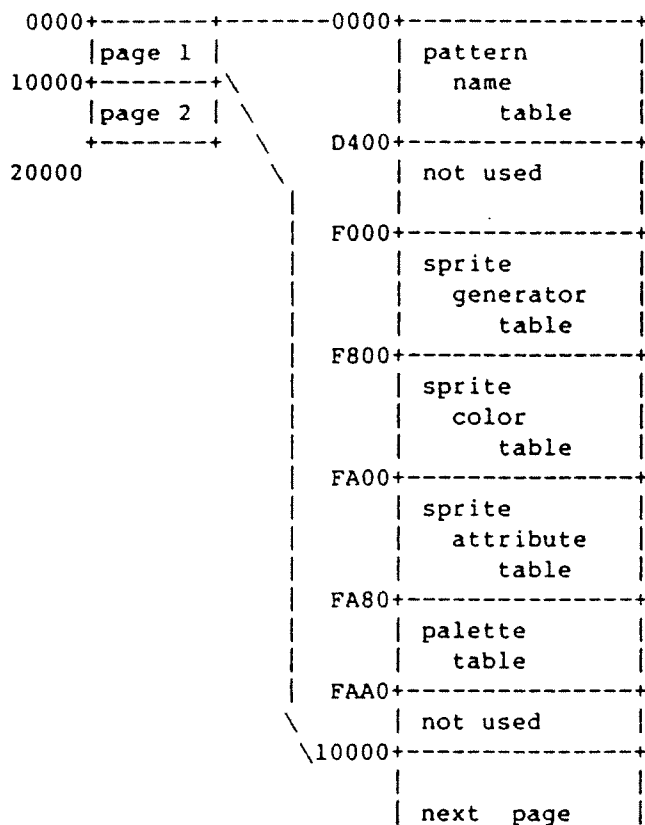
8. SCREEN 7 GRAPHIC-6 (512X212 bit map)

PATTERN NAME TABLE	0000H - D3FFH	54272 bytes
SPRITE GENERATOR TABLE	F000H - F7FFH	2048 bytes
SPRITE COLOR TABLE	F800H - F9FFH	512 bytes
SPRITE ATTRIBUTE TABLE	FA00H - FA7FH	128 bytes
PALETTE TABLE	FA80H - FA9FH	32 bytes



9. SCREEN 8 GRAPHIC-7 (256X212 bit map)

PATTERN NAME TABLE	0000H - D3FFH	54272 bytes
SPRITE GENERATOR TABLE	F000H - F7FFH	2048 bytes
SPRITE COLOR TABLE	F800H - F9FFH	512 bytes
SPRITE ATTRIBUTE TABLE	FA00H - FA80H	128 bytes
PALETTE TABLE	FA80H - FA9FH	32 bytes



10. Table addresses

SCREEN	pattern name	pattern gen.	color table	sprite gen.	sprite color	sprite attr.	palette	bytes/ page	number of page
0 (40)	0000	0800	-	-	-	-	0400	1000	32
0 (80)	0000	1000	0800	-	-	-	0F00	2000	16
1	1800	0000	2000	3800	-	1B00	2020	4000	8
2	1800	0000	2000	3800	-	1B00	2020	4000	8
3	0800	0000	-	3800	-	1B00	2020	4000	8
4	1800	0000	2000	3800	1C00	1E00	2020	4000	8
5	0000	-	-	7800	7400	7600	7680	8000	4
6	0000	-	-	7800	7400	7600	7680	8000	4
7	0000	-	-	F000	F800	FA00	FA80	10000	2
8	0000	-	-	F000	F800	FA00	FA80	10000	2

SCREEN	pattern name register #2	color table register #3,10	pattern gen. register #4	sprite attr. register #5,11	sprite pattern register #6
0 (40)	0GFEDCBA	- -	00GFEDCB	- -	- -
0 (80)	0GFEDC11	#3 DCBA9111 #10 00000GFE	00GFEDCB	- -	- -
1	0GFEDCBA	#3 DCBA9876 #10 00000GFE	00GFEDCB	#5 EDCBA987 #11 000000GF	00GFEDCB
2	0GFEDCBA	#3 D1111111 #10 00000GFE	00GFED11	#5 EDCBA987 #11 000000GF	00GFEDCB
3	0GFEDCBA	- -	00GFEDCB	#5 EDCBA987 #11 000000GF	00GFEDCB
4	0GFEDCBA	#3 D1111111 #10 00000GFE	00GFED11	#5 EDCBA987 #11 000000GF	00GFEDCB
5	0GF11111	- -	- -	#5 EDCBA111 #11 000000GF	00GFEDCB
6	0GF11111	- -	- -	#5 EDCBA111 #11 000000GF	00GFEDCB
7	00G11111	- -	- -	#5 EDCBA111 #11 000000GF	00GFEDCB
8	00G1111	- -	- -	#5 EDCBA111 #11 000000GF	00GFEDCB

*6 = A6, 7 = A7, ... , A = A10, B = A11, ... , F = A15, G = A16

*0 = constant 0

*1 = constant 1

11. Address calculation algorithm

SCREEN	calculate algorithm
5	PAGE# X 8000H + (base address)
6	PAGE# X 8000H + (base address)
7	PAGE# X10000H + (base address)
8	PAGE# X10000H + (base address)