【BIOS ROM file image】

MSX-MUSIC and MSX LOGO in FS-A1ST
MSX-MUSIC and MSX-MIDI in FS-A1GT

MSX LOGO in FS-A1GT

	slot 0-0	slot 0-1	slot 0-2	slot 0-3
page0	MAIN-ROM	empty	empty	empty
page1	MAIN-ROM	empty	FM-BIOS	OPTION-ROM
page2	empty	empty	empty	empty
page3	empty	empty	empty	empty

	slot 1		slot 1
page0	empty		SLOT X1
page1	ESE-SCC1	OR	SLOT X1
page2	ESE-SCC1		SLOT X1
page3	empty		SLOT X1

	slot 2		slot 2
page0	empty		SLOT X2
page1	ESE-SCC2	OR	SLOT X2
page2	ESE-SCC2		SLOT X2
page3	empty		SLOT X2

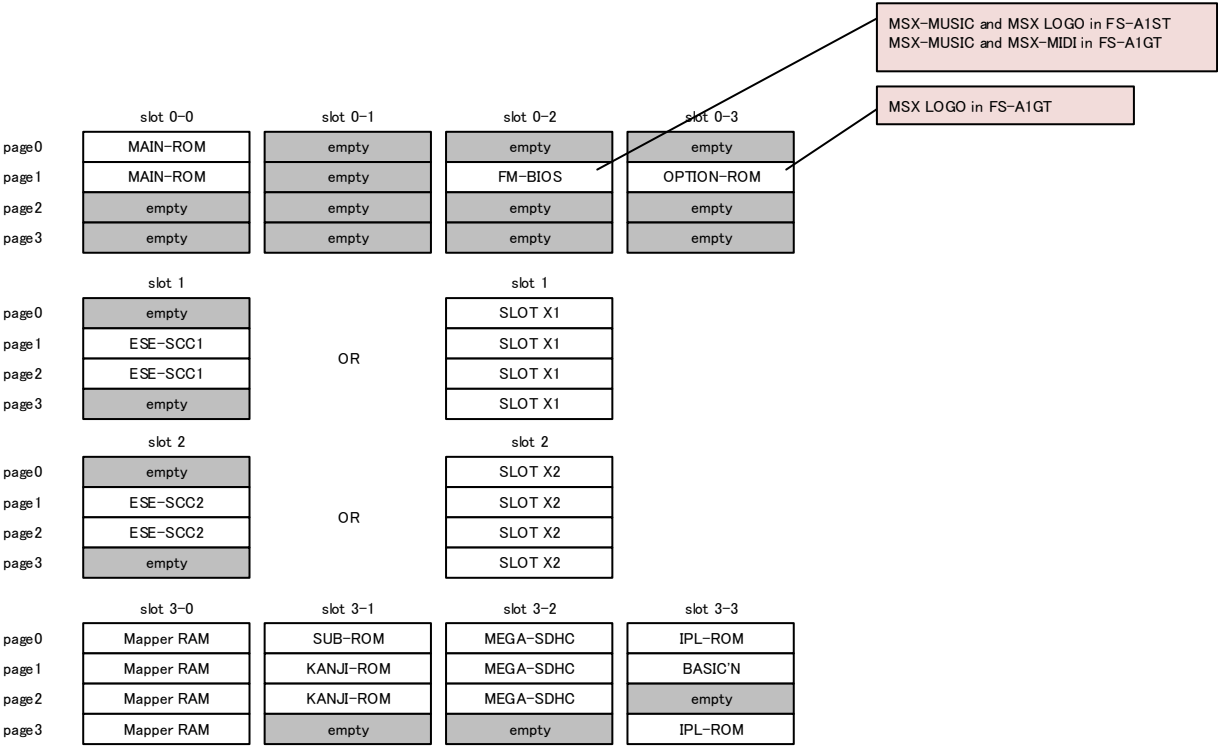|	slot 3-0	slot 3-1	slot 3-2	slot 3-3
page0	Mapper RAM	SUB-ROM	MEGA-SDHC	IPL-ROM
page1	Mapper RAM	KANJI-ROM	MEGA-SDHC	BASIC'N
page2	Mapper RAM	KANJI-ROM	MEGA-SDHC	empty
page3	Mapper RAM	empty	empty	IPL-ROM

【emsxcv boot up sequence with IPLROM 2.01】

IPLROM version

; iplrom2de0cv.vhd
;   initial program loader for Cyclone & EPCS (Altera)
;   Revision 2.01

Initial State

	slot 0-0	slot 0-1	slot 0-2	slot 0-3
page0	MAIN-ROM	empty	empty	empty
page1	MAIN-ROM	empty	FM-BIOS	OPTION-ROM
page2	empty	empty	empty	empty
page3	empty	empty	empty	empty

	slot 1		slot 1
page0	empty		SLOT X1
page1	ESE-SCC1	OR	SLOT X1
page2	ESE-SCC1		SLOT X1
page3	empty		SLOT X1

	slot 2		slot 2
page0	empty		SLOT X2
page1	ESE-SCC2	OR	SLOT X2
page2	ESE-SCC2		SLOT X2
page3	empty		SLOT X2

	slot 3-0	slot 3-1	slot 3-2	slot 3-3
page0	Mapper RAM	SUB-ROM	MEGA-SDHC	IPL-ROM
page1	Mapper RAM	KANJI-ROM	MEGA-SDHC	BASIC'N
page2	Mapper RAM	KANJI-ROM	MEGA-SDHC	empty
page3	Mapper RAM	empty	empty	IPL-ROM

PPI(8255)

A8h (Primary Slot Selector)
    Page0: Slot3
    Page1: Slot3
    Page2: Slot3
    Page3: Slot3

Expansion Slot Register for Slot#3 (Memory Address 0xFFFF in Slot3)
    Page0: Slot3-3
    Page1: Slot3-2
    Page2: Slot3-2
    Page3: Slot3-0

Active slot

slot 3-3	IPL-ROM
slot 3-2	MEGA-SDHC
slot 3-2	MEGA-SDHC
slot 3-0	Mapper RAM

【MEMO】
When write I/O A8h, IPL-ROM is disconnect.

MEGA-SDHC BIOS does not work at this timing.
However, the SDHC slot that is memory mapped I / O is accessible.

MemoryID / BankID	Content
MemoryID 00h: BankID 80h:	SLOT0-0: PAGE0
MemoryID 00h: BankID 81h:	SLOT0-0: PAGE1
MemoryID 00h: BankID 82h:	SLOT0-0: PAGE2
MemoryID 00h: BankID 83h:	SLOT0-0: PAGE3
MemoryID 00h: BankID 84h:	SLOT0-1: PAGE0
MemoryID 00h: BankID 85h:	SLOT0-1: PAGE1
MemoryID 00h: BankID 86h:	SLOT0-1: PAGE2
MemoryID 00h: BankID 87h:	SLOT0-1: PAGE3
MemoryID 00h: BankID 88h:	SLOT0-2: PAGE0
MemoryID 00h: BankID 89h:	SLOT0-2: PAGE1
MemoryID 00h: BankID 8Ah:	SLOT0-2: PAGE2
MemoryID 00h: BankID 8Bh:	SLOT0-2: PAGE3
MemoryID 00h: BankID 8Ch:	SLOT0-3: PAGE0
MemoryID 00h: BankID 8Dh:	SLOT0-3: PAGE1
MemoryID 00h: BankID 8Eh:	SLOT0-3: PAGE2
MemoryID 00h: BankID 8Fh:	SLOT0-3: PAGE3
MemoryID 00h: BankID 90h:	SLOT3-1: PAGE0
MemoryID 00h: BankID 91h:	SLOT3-1: PAGE1
MemoryID 00h: BankID 92h:	SLOT3-1: PAGE2
MemoryID 00h: BankID 93h:	SLOT3-1: PAGE3

MemoryID	Content
MemoryID 01h:	SLOT3-2: MegaSDHC
MemoryID 02h~03h:	SLOT1: ESE-SCC1
MemoryID 04h~05h:	SLOT2: ESE-SCC2
MemoryID 08h~0Bh:	SLOT3-0: Mapper Memory
MemoryID 0Ch:	Kanji ROM
MemoryID 10h~13h:	SLOT3-3: PanaROM
MemoryID 1Fh:	VRAM