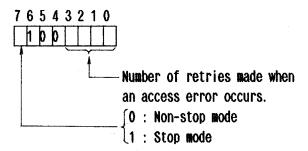
DFTATR (at 0F2E4H) 01H byte Type: o

- The initial value is ØC2H.

- Contains the default data for TACATR (@F7DlH), the tape access attribute flag.



- See 3.7, "MTOS/MIOS Operations."

WRTATR (at ØF2E5H) Ø1H byte

SRDATR (at ØF2E6H) ØlH byte Type: x

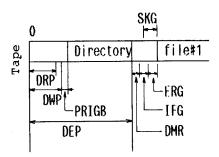
- The initial value is ØC2H.

- $\boldsymbol{\mathsf{-}}$  Is the tape access attribute flag used by the system when reading.
- The bit assignments are identical to those of DFTATR (ØF2E4H).
- See 3.7, "MTOS/MIOS Operations."

DRP (at ØF2E7H) Ø2H bytes Type: o

- This counter is initialized to 003CH.

- The counter specifying the position in the MCT directory where reading is to start.



- See 3.7, "MTOS/MIOS Operations."

DWP (at ØF2E9H) Ø2H bytes Type: o

- This counter is initialized to 004DH.
- The Counter specifying the position in the MCT directory where a write is to start.
- See 3.7, "MTOS/MIOS Operations."

DEP (at ØF2EBH) Ø2H bytes Type: o

- This counter is initialized to 00D9H.
- The counter specifying the upper limit of the end of the directory area.
- See 3.7, "MTOS/MIOS Operations."

- The initial value is 0068H. - Specifies the length of the gap between the directory and the file areas on MCT.
- See 3.7, "MTOS/MIOS Operations." IFG (at ØF2EFH) Ø2H bytes Type: o - The initial value is 0068H. - Specifies the length of the gap between files on MCT. - See 3.7, "MTOS/MIOS Operations."

SKG (at 0F2F1H) 02H bytes Type: o

- The initial value is 0034H.

- Specifies the interval between seeks during an MCT file seek.

- See 3.7, "MTOS/MIOS Operations."

ERG (at ØF2F3H) Ø2H bytes Type: o

- The initial value is 0034H.

- Specifies the length of the gap up to the point where a file write is to start.

- See 3.7, "MTOS/MIOS Operations."

LERG (at ØF2F5H) Ø2H bytes Type: o

The initial value is ØØ4EH.

- Specifies the length of the trailing gap up to the point where the MCT file is closed.

- See 3.7, "MTOS/MIOS Operations."

BKG (at ØF2F7H) 02H bytes

PRIGB (at ØF2F9H) Ø2H bytes

ØlH byte CCDFLT (at ØF2FBH) Type: o

- The initial value is 05H.

- Loaded with the tape correction count.

- See 3.7, "MTOS/MIOS Operations."

CRCCNT (at ØF2FCH) ØlH byte Type: #

- The initial value is 05H.

- Is the counter that counts the number of tape count corrections.

- This counter is decremented by one each time a file is created. When the counter reaches 00H, the MCT rewinds the tape to the beginning and the tape count value is corrected. The correction count is specified in CCDFLT (@F2FBH).

- See 3.7, "MTOS/MIOS Operations."

BLKWRTNO (at ØF2FDH) Ø1H byte Type: o

- The initial value is Ø3H.

- Indicates the number of times a block is to be re-written.

- The initial value indicates twice.

- See 3.7, "MTOS/MIOS Operations."

LMCTRED (at ØF2FEH) Ø4H bytes Type: o

- The initial value is 3EH, 0FFH, 18H, 02H.

- Indicates the error return point entered during an MCT read executed through BIOS.

- Loaded with instruction codes. Initially the codes load ØFFH into BIOS ERROR (ØF52BH).

- See 3.7, "MTOS/MIOS Operations."

LMCTWRT (at ØF3Ø2H) Ø6H bytes Type: o - The initial value is 3EH, ØFFH, 32H, 2BH, ØF5H, ØC9H.

- Indicates the error return point entered during an MCT write executed through BIOS.

- Loaded with instruction codes. Initially the codes load @FFH into BIOSERROR (ØF52BH).

- See 3.7, "MTOS/MIOS Operations."

ALRMTIME (at ØF3Ø8H) ØlH byte Type: o

- The initial value is 32H.

- Specifies the alarm screen display time in seconds.

- When the initial value is set, the screen automatically switches from the alarm screen mode back to the original mode after 50 seconds.

- See 2.9, "Alarm/Wake Function."

CSTOPPRT (at ØF3Ø9H) ØlH byte Type: #

- The initial value is 00H.

- This flag is used to interrupt cartridge printer processing when the CTRL/STOP key is pressed.

= 00H: Cartridge printer processing not to be interrupted.

= 01H: Cartridge printer processing to be interrupted.

This flag is reset by PSTBIOS.

- See 3.5.3, "Standard Keyboard."

(Reserved) (at ØF3ØAH) Ø6H bytes

#### 6.2.4 System Area III (RSYSAR3)

This area is initialized by system initialize, reset, restart, power-on, and WBOOT processing.

CNTNFG (at ØF31ØH) Ø1H byte Type: x

- The initial value is ØFFH.

- This flag indicates whether the power-off mode.

= 00H: Continue mode

= ØFFH: Restart mode

- When power is turned on, this flag is set to power-on mode.

- See 2.5, "Power-off."

FRCECNTN (at ØF311H) Ø1H byte Type: o

- The initial value is 00H.

- This flag specifies the power-off mode when an standard keyboard is installed.

= 00H Restart power off mode

= Other than ØØH: Continue power off mode

- See 2.5, "Power-off."

IFRCECNT (at 0F312H) 01H byte Type: o

- The initial value is OFFH.

- This flag specifies the power-off mode when an item keyboard is installed.

= ØØH Restart power off mode

= Other than 00H: Continue power off mode

- See 2.5, "Power-off."

```
TMFUNC (at ØF313H) ØlH byte Type: o
- The initial value is 00H.
- TMFUNC is the user timer function on/off flag.
                        Timer function OFF
     = Other than ØØH: Timer function ON
- See 4.7.4, "7508 Interrupts."
TMFLAG (at ØF314H) Ø1H byte Type: o
- The initial value is 00H.
- This flag indicates whether or not setting of the user timer
function is completed.
     = 00H: Not completed
= 0FFH: Completed
- The value of TMSEC (ØF4DAH) is decremented by one each time a
1-second interrupt occurs. When the value reaches 0000H, this
flag is set to ØFFH.
- See 4.7.4, "7508 Interrupts."
BFLASHDT (at ØF315H) Ø1H byte
ROMEXQ (at 0F316H) 01H byte Type: x
- The initial value is 00H.
- This flag is used by the system when executing a ROM-based
program.
     = ØØH
                        ROM-based program not executed
     = Other than 00H: ROM-based program executed
- See 4.6, "Executing a ROM Program."
COMPCOL (at ØF317H) Ø1H byte Type: x
- The initial value is 00H.
- A work area used by BDOS to display characters.
- See 3.2, "BDOS Operations."
STRTCOL (at ØF318H) Ø1H byte Type: x
- The initial value is 00H.
- A work area used by BDOS to display characters.
- See 3.2, "BDOS Operations."
COLUMN (at ØF319H) ØlH byte Type: x
- The initial value is 00H.
- A work area used by BDOS to display a character.
- See 3.2, "BDOS Operations."
LISTCP (at ØF31AH) Ø1H byte Type: o
- The initial value is 00H.
- This toggle switch is used by BDOS to indicate whether or not
to output to the LIST device.
     = 00H: No LIST output
     = 01H:
            LIST output
- See 3.2, "BDOS Operations."
KPCHAR (at 0F31BH) 01H byte Type: x
- The initial value is 00H.
- A work area used by BDOS during keyboard interrupt processing.
                       No keyboard interrupt occurred.
     = Other than 00H: Key interrupt occurred (input key code).
- See 3.2, "BDOS Operations."
USRCODE (at ØF31CH) Ø1H byte Type: #
- The initial value is 00H.
- Loaded with the currently specified user number.
- See 3.2, "BDOS Operations."
```

CURDSK (at ØF31DH) Ø1H byte Type: #

- The initial value is 00H.

- Loaded with the current disk drive code.
- See 3.2, "BDOS Operations."

EFCB (at ØF31EH) Ø1H byte Type: x

- The initial value is ØE5H.

- Indicates the code used to search the directory for a free entry when a file is created by BDOS.

- See 3.2, "BDOS Operations."

RODSK (at 0F31FH) 02H bytes Type: #

- The initial value is 0000H.
- Loaded with the R/O disk vector.

## 7 6 5 4 3 2 1 0 +0 H G F E D C B A 1 D D D D D K U I

(Each bit indicates R/O when set to 1 and R/W when  $\emptyset$ .) - See 3.2, "BDOS Operations."

DLOG (at ØF321H) Ø2H bytes Type: #

- The initial value is 0000H.
- Loaded with the log-in disk vector value.

# 7 6 5 4 3 2 1 0 +0 H G F F D C B A 1 D D D D D K U I

(Each bit indicates a selected drive when set to 1.)

- See 3.2, "BDOS Operations."

DMAAD (at ØF323H) Ø2H bytes Type: #

- Indicates the starting address of the DMA buffer used for BDOS processing.
- The DMA buffer is located at SYSDMA (@F8B1H).
- See 3.2, "BDOS Operations."

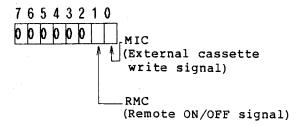
USRDMA (at ØF325H) Ø2H bytes Type: #

- The initial value is 0080H.
- Indicates the starting address of the user DMA buffer used in BDOS processing.
- See 3.2, "BDOS Operations."

RZCTLR2 (at ØF327H) Ø1H byte Type: o

- The initial value is 00H.

- This area stores the output state of control register 2 (PØ2H).



 $1:ON, \emptyset:OFF$ 

- The bit assignments for this area are identical for those of CTLR2 (P02H).

- See Chapter 5, "I/O Operations."

CHGRIGT (at ØF328H) ØEH bytes Type: o - Is the table that contains the arrow, SHIFT/arrow and CTRL/arrow key code.

Address	Key	Initial value	Address	Key	Initial value
F328H	<b>→</b>	1CH	F32FH	SHIFT /↓	
29H	<b>←</b>	1DH	30H	SHIFT /INS	FbH
2AH	1	1EH	31H	CTRL /→	16H
28H	ļ	1FH	32H	CTRL /←	17H
2CH	SHIFT /→	<b>06</b> H	33H	CTRL /↑	14H
20H	SHIFT /←	02H	34H	CTRL /↓	15H
2EH	SHIFT /†	10H	35H	CTRL /INS	F7H

<sup>-</sup> The 14-byte data block starting at DFLTRT is copied into this area at warm boot time.

- See 3.5.3, "Standard Keyboard."

RNSCOF (at ØF336H) ØlH byte

<sup>-</sup> The initial values are used for keyboard interrupt processing on the system menu screen.

INHCOPY (at ØF337H) ØlH byte Type: x

- The initial value is 00H.

- This flag indicates whether or not screen dump processing is in progress.
  - = 00H : Not in progress
  - = Other than 00H: In progress

- See 3.4, "BIOS Details."

MDMMOD (at ØF338H) ØlH byte Type: o

- The initial value is 00H.

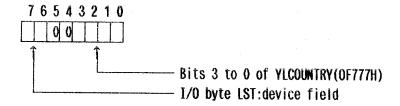
- This flag is used to disable screen dump processing via the RS-232C or SIO interface.
  - = 00H : SCRNDUMP enabled
  - = Other than 00H: SCRNDUMP disabled
- A beep is generated as an alarm if an attempt is made to execute SCRNDUMP when screen dump processing is disabled.

- Refer to (19) SCRNDUMP in 3.4.2.

PRTFLG (at ØF339H) Ø1H byte Type: #

- The initial value is 00H.

- This flag indicates whether or not an international character set has been indicated to the printer.
  - = 00H : No output was received
  - = Other than 00H: Output was received
- The figure below shows the bit assignments for this area (when PRTFLG is not set to  $\emptyset\emptyset$ H) for Export version 1.0.



- See (6) LIST in 3.4.2.

DISBRK (at ØF33AH) ØlH byte Type: x

- The initial value is 00H.
- This flag is used by the system to control the power-off and alarm screen display modes during screen dump processing.
  - = 00H : Power-off, alarm screen displays enabled = Other than 00H: Power-off, alarm screen displays disabled
- = Other than 00H: Power-off, alarm screen displays disabled See 3.4, "BIOS Details."

RSCLSF (at 0F33BH) 01H byte

SRMODE (at ØF33CH) Ølh byte Type: #

- The initial value is OFFH.
- Indicates the current serial interface state.
  - = ØFFH: Unused
  - = 00H: Used by printer (LIST)
  - = 01H: Used by the user (RSIOX)
  - = Ø2H: Used by FDD
- See 5.2, "Serial Interfaces."

ECSNCPWC (at ØF33DH) ØlH byte Type: o

- The initial value is 50H.
- Specifies the time-count by which to write synchronous signals when writing synchronous patterns to the external cassette.
- This area is used in BASIC external cassette processing.

ECSNCPRC (at ØF33EH) Ø1H byte Type: o

- The initial value is 28H.
- Specifies the time-count by which to read synchronous signals which must be checked when reading synchronous patterns from the external cassette.
- This area is used by BASIC for external cassette processing.

ECKEYWRD (at ØF33FH) ØlH byte Type: o

- The initial value is 00H.
- Specifies the mask pattern for data protection used during a read from or write to the external cassette.
- Data is XORed with this pattern before being written to the external cassette.
- This area is used by BASIC for external cassette processing.

ECBlTIME (at 0F340H) 02H bytes Type: o

- The initial value is 0072H.
- $\boldsymbol{\mathsf{-}}$  Specifies the width of the waveform of 1 data bits written to the external cassette.
- The initial value corresponds to approximately 500  $\mu s$ .
- This value is used by BASIC for external cassette processing.

ECBØTIME (at ØF342H) Ø2H bytes Type: o

- The initial value is 0032H.
- Specifies the width of  $\emptyset$  data bits written to the external cassette.
- The initial value corresponds to approximately 250  $\mu s$ .
- This value is used by BASIC for external cassette processing.

ECMCTTMR (at 0F344H) 02H bytes Type: o

- The initial value is ØlD5H.
- Specifies the threshold value for  $\ensuremath{\text{0}}$  and 1 bits read from the external cassette.
- The unit is approximately 1.63  $\mu s$ . The initial value corresponds to approximately 750  $\mu s$ .
- This value is used by BASIC for external cassette processing.

ECMCTØTH (at ØF346H) Ø2H bytes Type: o

- The initial value is 0069H.
- Specifies the threshold value used to distinguish  $\emptyset$  bits read from the external cassette from noises.
- The unit is approximately 1.63  $\mu s$  . The initial value corresponds to approximately 170  $\mu s$  .
- This value is used for BASIC external cassette processing.

ECCRCPL (at 0F348H) 02H bytes Type: o

- The initial value is 8408H.
- Contains the mask pattern (CRC-CCITT) used during external cassette CRC.
- This pattern is used by BASIC for external cassette processing.

ECSBIGLN (at ØF34AH) ØlH byte Type: o

- The initial value is ØAH.

- Specifies the external cassette interblock gap generated during the second write.
- This area is used by BASIC for external cassette processing.

ECLBIGLN (at ØF34BH) ØlH byte Type: o

- The initial value is 64H.
- Specifies the external cassette interblock gap.
- This area is used by BASIC for external cassette processing.

ECLFTP (at ØF34CH) Ø5H bytes

TOSDMA (at ØF351H) Ø2H bytes Type: # - The initial value is TOSBUF (ØFB97H).

- Indicates the MCT DMA buffer starting address.
- See 3.7, "MTOS/MIOS Operations."

ALCVAD (at 0F353H) 02H bytes Type: #

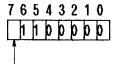
- The initial value is ALV7 (@F735H).
- Indicates the MCT allocation vector starting address.
- See 3.7, "MTOS/MIOS Operations."

OPNMOD (at ØF355H) Ø1H byte Type: #

- The initial value is 00H.
- Indicates the current MCT open state.
  - = 00H: Not open
  - = 01H: Read mode open
  - = 02H: Write mode open
- See 3.7, "MTOS/MIOS Operations."

MISSTS (at ØF356H) ØlH byte Type: o

- The initial value is ØEØH.
- This flag specifies the MIOS processing mode.



- Move protect bit

= 0 : Not specified /

= 1 : Specified

- When the move protect bit is set, a move protect area is established for the number of counts specified in TAPMVC(ØF35AH) during MIOS MIRDBL or MIWTBL.
- See 3.7, "MTOS/MIOS Operations."

BMDCNT (at ØF357H) Ø1H byte Type: o

- The initial value is 02H.
- Specifies the number of retries to be made after a block mode error occurs during a read operation.
- See 3.7, "MTOS/MIOS Operations."

RRBKMD (at ØF358H) ØlH byte

RNIDPT (at ØF359H) Ø1H byte

TAPMVC (at ØF35AH) Ø2H bytes Type: o

- The initial value is 00C8H.
- Indicates the default count value of the move protect area used by the system.
- See 3.7, "MTOS/MIOS Operations."

RLCGENX (at ØF35CH) Ø2H bytes Type: o

- The initial value is 5960H (In OSROM)
- Indicates the starting address of the character generator data for character codes  ${\tt 00H}$  to 1FH.
- When rewriting this address, set RLCGENX to address  $8000 \mathrm{H}$  or higher in RAM.
- (This function is supported only by OS Kana V2.0.)
- See 3.6, "LCD Display (CONOUT Details)."

RLCGENN (at ØF35EH) Ø2H bytes Type: o

- The initial value is 5960H (In OSROM)
- Indicates the starting address of the character generator data for character codes 20H to 7FH.
- When rewriting this address, set RLCGENN to address  $8000 \mathrm{H}$  or higher in RAM.
- (This function is supported only by OS Kana V2.0.)
- See 3.6, "LCD Display (CONOUT Details)."

RLCGENG (at ØF360H) 02H bytes Type: o

- The initial value is 5B40H (In OSROM)
- Indicates the starting address of the character generator data for character codes 80H to 9FH.
- When rewriting this address, set RLCGENG to address 8000H or higher in RAM.
- (This function is supported only by OS Kana V2.0.)
- See 3.6, "LCD Display (CONOUT Details)."

RLCGENK (at 0F362H) 02H bytes Type: o

- The initial value is 5C00H (In OSROM)
- Indicates the starting address of the character generator data for character codes ØAØH to ØDFH.
- When rewriting this address, set RLCGENK to address  $8000\mathrm{H}$  or higher in RAM.
- (This function is supported only by OS Kana V2.0.)
- See 3.6, "LCD Display (CONOUT Details)."

(Reserved) (at ØF364H) Ø4H bytes

#### 6.2.5 System Area IV (RSYSAR4)

This area is the system parameter area, which does not need to be initialized.

XUSRBIOE (at ØF368H) Ø3H bytes Type: x

- Loaded with the JP instruction to the user BIOS area starting address.
- This area is loaded according to the BIOS area size when the system is initialized.
- See 4.1, "User BIOS."

CNTNSP (at ØF36BH) Ø2H bytes Type: x - This area saves the currently specified stack pointer before power is turned off in the continue mode. - See 2.5, "Power-off."

CNTNILVL (at ØF36DH) ØlH byte Type: x

- This area saves the currently specified 7508 interrupt level (INTLEVEL) before executing power-off processing in the continue mode.
- See 2.5, "Power-off."

YPWSWST (at ØF36FH) ØlH byte Type: #

- This area is used by the system to store the current power switch state.
  - = 00H: Power switch off state
  - = 01H: Power switch on state

YMAINST (at ØF370H) ØlH byte Type: #

- This area is used by the system to control main CPU Z-80 power.
  - = 00H: Power off command transmitted to the 7508
  - = 01H: Operating in power on state

ZSTARTFG (at ØF371H) Ø1H byte Type: x

- This flag is used by the system to specify Ø address start processing.
  - = 00H: Executes warm boot processing.
  - = 01H: Executes power on processing.
  - = Ø2H: Executes alarm processing.
  - = 03H: Executes wake processing. = 05H: Executes reset processing.
  - = 06H: Executes system initialize processing.
- This flag is reset by WBOOT.

CHKSUMFG (at ØF372H) Ø1H byte

CHKSUM (at ØF373H) Ø2H bytes Type: x

- This area is used to store the system area checksum result.
- At next power-on time, the checksum is calculated again to check whether or not the contents of RAM has been destroyed.
- See 2.5, "Power-off."

WKEYWORK (at ØF375H) 16H bytes Type: x

- This area is used to save the 22-byte data starting at KEYF ( $\emptyset$ F $\emptyset$ 08H) when the alarm screen is displayed.
- See 2.9, "Alarm/Wake."

WKBUF (at ØF38BH) 21H bytes Type: x

- This area is used to save the 33-byte data starting at KBUF (ØF860H) when the alarm screen is displayed.
- See 2.9, "Alarm/Wake".

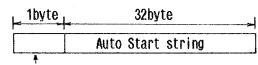
WREIOCTLR (at 0F3ACH) 01H byte Type: x - This area is used to save the value of RZIOCTLR (0F006H) when the alarm screen is displayed. - See 2.9, "Alarm/Wake."

WYSHFDT (at 0F3ADH) 01H byte Type: x
- This area is used to save the current YSHFDT (0F00FH) data to process the old keyboard data, which had been entered before the alarm screen was displayed, when exiting the alarm screen.
- See 2.9, "Alarm/Wake."

WIMSHFT (at 0F3AEH) 01H byte Type: x
- This area is used to save the current IMSHFT (0F01CH) data to process the old keyboard data, which had been entered before the alarm screen was displayed, when exiting the alarm screen.
- See 2.9, "Alarm/Wake."

ARRWWORK (at ØF3AFH) ØEH bytes Type: x - This area is used to save the 14-byte data starting at CHGRIGT (ØF328H) when displaying the system display screen. - See 2.11, "System Display.".

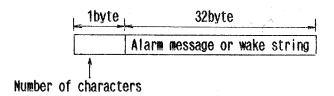
AUTOSTRT (at ØF3BDH) 22H bytes Type: o - This area is used to specify the auto start string.



Number of characters

- The number of characters must be within the range of 00H to 20H. 00H indicates that no auto start string is specified. - See 2.7, "Auto Start Function."

ALRMMSG (at ØF3DFH) 22H bytes Type: o - This area is used to specify the alarm message or wake string.



- The number of characters is within the range of 00H to 20H. 00H indicates that neither alarm message nor wake string are specified.

- See 2.9, "Alarm/Wake Function."

STIMBUF (at 0F401H) 18H bytes Type: x - This area is used to display the currently set date, time and day of the week on the menu and system display screens.

SSEDITWK (TIMEWK) (at 0F419H) 20H bytes Type: x - This area is used by the system to edit the input key. (Used during system initialize, menu and system display processing)

TPCNTWK (at ØF439H) Ø2H bytes

MFILENO (at ØF43BH) ØlH byte Type: x

- Indicates the number of files to be displayed on the menu screen.
- See 2.10, "Menu."

MLASTPAGE (at ØF43CH) Ø1H byte Type: x

- Indicates the total number of pages to be displayed on the menu screen.
- See 2.10, "Menu."

MLASTFX (at ØF43DH) Ø1H byte Type: x

- Indicates the horizontal position of the last file name to be displayed on the menu screen.
- See 2.10, "Menu."

MLASTFY (at ØF43EH) Ø1H byte Type: x

- Indicates the vertical position of the last file name to be displayed on the menu screen.
- See 2.10, "Menu."

MFOVER (at ØF43FH) Ø1H byte Type: x

- This flag indicates that the number of files to be displayed on the menu screen exceeds 72.
- See 2.10, "Menu."

MCPAGE (at 0F440H) 01H byte Type: x

- Indicates the page number of the page which is currently displayed on the menu screen.
- See 2.10, "Menu."

MCFX (at ØF441H) Ø1H byte Type: x

- Indicates the horizontal position of the file name which is currently displayed on the menu screen.
- See 2.10, "Menu."

MCFY (at ØF442H) ØlH byte Type: x

- Indicates the vertical position of the file name which is currently displayed on the menu screen.
- See 2.10, "Menu."

MCMNDLY (at 0F443H) 01H byte Type: x

- Indicates the vertical position of the command line displayed on the menu screen.
- See 2.10, "Menu."

MCMNDLWK (INPWK) (at ØF444H) 29H bytes Type: x

- This area is used to edit the input data on the command line on the menu screen.
- See 2.10, "Menu."

MCRSRPOS (at 0F46DH) 01H byte Type: x

- Indicates the horizontal position of the cursor currently displayed on the command line on the menu screen.
- See 2.10, "Menu."

MCFTYPE (at ØF46EH) ØlH byte Type: x - Indicates the type of the file which is currently specified on the menu screen. - See 2.10, "Menu."

MVSPOSX (at ØF46FH) ØlH byte Type: x
- Indicates the horizontal position on the virtual screen of the file which is currently specified on the menu screen.
- See 2.10, "Menu."
MVSPOSY (at ØF470H) ØlH byte Type: x
- Indicates the vertical position on the virtual screen of the file which is currently specified on the menu screen.
- See 2.10, "Menu."

MLCFX (at 0F471H) 01H byte Type: x
- This area is used to record the old MCFX to restore the old cursor field to normal video when displaying a file name in reverse video on the menu screen.
- See 2.10, "Menu."

MLCFY (at 0F472H) 01H byte Type: x
- This area is used to record the old MCFY to restore the old cursor field to normal video when displaying a file name in reverse video on the menu screen.
- See 2.10, "Menu."

MTIMEBUF (at ØF473H) 18H bytes Type: x
- Used as a work area to display the header (date, time, day of the week) on the menu screen.
- See 2.10, "Menu."

MCOMFNO (at ØF48BH) ØlH byte Type: x
- This flag indicates whether or not COM is specified in FTYPETBL during menu processing.
- See 2.10, "Menu."

SVMENUDR (0F48CH) 43H bytes Type: x
- This area is used by system display to save the 67-byte data at currently specified MENUDR when modifying the menu display drive specification during menu processing.
- See 2.10, "Menu."

MENUSTS (at ØF4CFH) ØlH byte Type: x
- This flag indicates that system display has modified the menu display drive.
- See 2.10, "Menu."

MBRCKFG (at ØF4DØH) Ø1H byte Type: x
- This flag indicates the display status when displaying a file name in reverse video on the menu screen.
- See 2.10, "Menu"

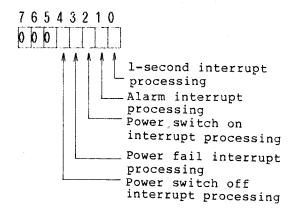
ROMCT (at 0F4DlH) 0lH byte Type: x
- This counter is used when turning off the ROM cartridge power due to a 1-second interrupt.
- 02H is loaded when accessing the ROM cartridge.
- See 5.1, "Cartridges."

ROMOFG (at 0F4D2H) 01H byte Type: x
- Indicates whether or not the ROM cartridge power has been turned off by a 1-second interrupt.
= 00H: No ROM cartridge power off required.
= 0FFH: ROM cartridge power is turned off.

- See 5.1, "Cartridges."

ENTSINT (at ØF4D3H) Ø2H bytes Type: x - This area is used during system interrupt processing to save the stack pointer when an interrupt occurs. - See 4.7, "Interrupts."

INTFG (at  $\emptyset$ F4D5H)  $\emptyset$ 1H byte Type: # - Indicates the type of 75 $\emptyset$ 8 interrupt processing initiated by the system.

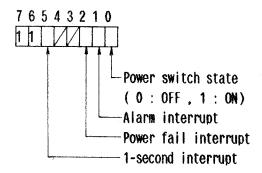


(Each bit is set to 1 when the corresponding interrupt processing is started.)

- INTFG is set to 00H when keyboard interrupt processing is executed.
- See 4.7.4, "7508 Interrupts."

STS7508 (at 0F4D6H) 01H byte Type: #

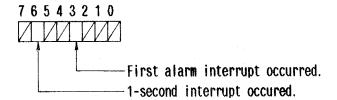
- This area is used by OS to store the 7508 status when a 7508 interrupt occurs.
- When the value of STS 7508 is between 00H and 0BFH, it indicates that a keyboard interrupt has occurred and gives a hard key code.
- When STS7508 is more than OCOH, it indicates the following:



(Each bit is set to 1 when an interrupt is generated.)

- See 4.7.4, "7508 Interrupts."

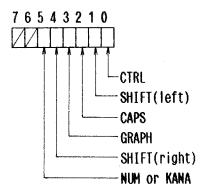
FG7508 (at 0F4D7H) 01H byte Type: #
- Indicates 1-second and alarm interrupt processing states.



(Each bit is set to 1 when the corresponding interrupt occurs.)

- See 4.7.4, "7508 Interrupts."

KEYFLG (at 0F4D8H) 01H byte Type: #
- Indicates the switch key state when a 7508 interrupt is generated by the STOP key.



(Each bit is set to 1 when the corresponding key is pressed.)

- See 4.7.4, "7508 Interrupts."

ALRMCT (at  $\emptyset$ F4D9H)  $\emptyset$ lH byte Type: x - This counter is used to ignore any alarm interrupts generated within  $1\emptyset$  seconds after the first interrupt generated for the currently-set alarm time.

- ØAH is set when the first interrupt is generated.

- See 2.9, "Alarm/Wake."

TMSEC (at ØF4DAH) Ø2H bytes Type: o

- Specifies the user timer function time in seconds.
- The timer function is executed using TMFUNC (@F313H).
- See 4.7.4, "7508 Interrupts."

PWSWONFG (at 0F4DCH) 01H byte Type: #
- Indicates whether or not a power switch on interrupt has
occurred.

- = 00H: No power switch on interrupt has occurred.
- = @FFH: Power switch on interrupt has occurred.
- See 4.7.4, "7508 Interrupts."

```
PWSWOFFG (at ØF4DDH) Ø1H byte Type: #
 - Indicates whether or not a power switch off interrupt has
occurred.
     = ØØH:
              No power switch off interrupt has occurred.
     = Ø1H:
             Restart mode power switch off has occurred.
     = ØFFH: Continue mode power switch off has occurred.
- See 4.7.4, "7508 Interrupts."
AFTER3 (at ØF4DEH) Ø1H byte Type: x
- Used to check the alarm screen display termination time.
- See 2.9, "Alarm/Wake."
WFUNCFLG (at ØF4DFH) Ø1H byte Type: x
- Loaded with the value of YPFCMFLG (ØFØ17H) when the system
screen is displayed.
- See 2.11, "System Display."
INPSTOP (at ØF4EØH) ØlH byte
ENTSP (at 0F4E1H) 02H bytes Type: x
- Loaded with the user stack pointer when a BDOS function is
called.
- See 3.2, "BDOS Operations."
INFO (at ØF4E3H) Ø2H bytes Type: x
- A work area used by BDOS to save registers parameters.
- See 3.2, "BDOS Operations."
ARET (at ØF4E5H) Ø2H bytes Type: #
- Used to store the return code from BDOS.
- The value of ARET corresponds to the A register, and the value
- This area is affected by BDOS functions.
- See 3.2, "BDOS Operations."
```

of ARET + 1 to the B register.

CDRMAXA (at 0F4E7H) 02H bytes Type: x - Points to the area which is loaded by BDOS with the maximum number of the current disk directories. - See 3.2, "BDOS Operations."

CURTRKA (at ØF4E9H) Ø2H bytes Type: x - Points to the area which is loaded by BDOS with the currently specified track number. - See 3.2, "BDOS Operations."

CURRECA (at ØF4EBH) Ø2H bytes Type: x - Points to the area in which is loaded by BDOS with the currently specified record number. - See 3.2, "BDOS Operations."

BUFFA (at ØF4EDH) Ø2H bytes Type: x - Loaded by BDOS with the address of the DMA buffer used for a directory access.

- See 3.2, "BDOS Operations."

DPBADDR (at ØF4EFH) 02H bytes Type: x - Loaded by BDOS with the current disk parameter block starting address. - See 3.2, "BDOS Operations."

CHECKA (at ØF4F1H) Ø2H bytes Type: x
- Loaded by BDOS with the starting address of the area used when making software check on the directory of the current disk.
- See 3.2, "BDOS Operations."

ALLOCA (at ØF4F3H) Ø2H bytes Type: x - Loaded by BDOS with the current disk allocation area starting address. - See 3.2, "BDOS Operations."

SECTPT (at  $\emptyset$ F4F5H)  $\emptyset$ 2H bytes Type: x - Loaded by BDOS with the number of sectors per track on the current disk.

- See 3.2, "BDOS Operations."

BLKSHF (at @F4F7H) @lH byte Type: x
- Loaded by BDOS with the block shift factor value of the current disk.

- See 3.2, "BDOS Operations."

BLKMSK (at 0F4F8H) 01H byte Type: x
- Loaded by BDOS with the block mask value of the current disk.
- See 3.2, "BDOS Operations."

EXTMSK (at ØF4F9H) Ø1H byte Type: x
- Loaded by BDOS with the extent mask value of the current disk.
- See 3.2, "BDOS Operations."

MAXALL (at @F4FAH) @2H bytes Type: x - Loaded by BDOS with the maximum allocation number of the current disk. - See 3.2, "BDOS Operations."

DIRMAX (at @F4FCH) @2H bytes Type: x
- Loaded by BDOS with the maximum number of directory entries for the current disk.
- See 3.2, "BDOS Operations."

DIRBLK (at @F4FEH) @2H bytes Type: x
- Loaded by BDOS with the bit map of the block used as the current disk directory.
- See 3.2, "BDOS Operations."

CHKSIZ (at ØF500H) 02H bytes Type: x
- Loaded by BDOS with the current disk check vector size.
- See 3.2, "BDOS Operations."

OFFSET (at 0F502H) 02H bytes Type: x
- Loaded by BDOS with the current disk track offset value.
- See 3.2, "BDOS Operations."

TRANV (at 0F504H) 02H bytes Type: x
- Loaded by BDOS with the current disk sector conversion table starting address.
- See 3.2, "BDOS Operations."

FCB\$COPIED (at ØF5Ø6H) Ø1H byte

RMF (at ØF507H) ØlH byte Type: x
- This flag is used by BDOS to indicate the read mode.
- See 3.2, "BDOS Operations."

DIRLOC (at ØF508H) ØlH byte Type: x - This flag is used by BDOS to indicate whether or not rename processing has been executed. - See 3.2, "BDOS Operations." SEQIO (at ØF509H) ØlH byte Type: x - This flag is used by BDOS to indicate whether or not sequential read/write processing has been executed.
- See 3.2, "BDOS Operations." LINFO (at ØF50AH) ØlH byte Type: x - Stores the value of the E register when a BDOS function is used. - See 3.2, "BDOS Operations." DMINX (at 0F50BH) 01H byte Type: x - Used by BDOS to store the disk map position which is computed during a disk write. - See 3.2, "BDOS Operations." SEAR\$CHL (at ØF50CH) ØlH byte Type: x - Loaded by BDOS with the number of searches to be performed. - See 3.2, "BDOS Operations." SERA\$CHA (at ØF5ØDH) Ø2H bytes Type: x - Loaded by BDOS with the address containing the search key. - See 3.2, "BDOS Operations." TINFO (at ØF5ØFH) Ø2H bytes SINGLE (at 0F511H) 01H byte Type: x - This flag is used by BDOS to indicate whether or not the maximum allocation vector (MAXALL) is 1-byte data. - See 3.2, "BDOS Operations." RESEL (at 0F512H) 01H byte Type: x - This flag is used by BDOS to indicate whether or not the current disk must be restored into its original state. - See 3.2, "BDOS Operations." OLDDSK (at ØF513H) Ø1H byte Type: x - Used by BDOS to save the currently set current disk state so that the current disk can be restored into its original state. - See 3.2, "BDOS Operations." FCBDSK (at 0F514H) 01H byte Type: x - Used by BDOS to store the disk drive code in the FCB. - See 3.2, "BDOS Operations." RCOUNT (at 0F515H) 01H byte Type: x - Used by BDOS to store the number of records in the FCB. - See 3.2, "BDOS Operations." EXTVAL (at ØF516H) ØlH byte Type: x

EXTVAL (at 0F516H) 01H byte Type: x
- Used by BDOS to store the value of AND operation executed between the FCB extent number and the extent mask (EXTMSK).
- See 3.2, "BDOS Operations."

VRECORD (at 0F517H) 02H bytes Type: x 4
- Loaded by BDOS with the virtual record position currently being accessed.
- See 3.2, "BDOS Operations."

ARECORD (at  $\emptyset$ F519H)  $\emptyset$ 2H bytes Type: x - Loaded by BDOS with the actual record position currently being accessed.

- See 3.2, "BDOS Operations."

AREC1 (at 0F51BH) 02H bytes Type: x - Loaded by BDOS with the actual block position currently being accessed. - See 3.2, "BDOS Operations."

DPTR (at  $\emptyset$ F51DH)  $\emptyset$ 1H byte Type: x - This pointer is used by BDOS to update the specified directory position.

- See 3.2, "BDOS Operations."

DCNT (at 0F51EH) 02H bytes Type: x

- This count is used by BDOS to indicate the file position in the directory.

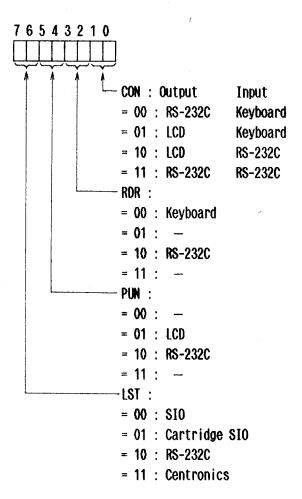
- See 3.2, "BDOS Operations."

DREC (at 0F520H) 02H bytes

YOLDDSK (at ØF522H) ØlH byte Type: x - Used by BDOS to save the current disk state when a new disk is selected. - See 3.2, "BDOS Operations."

USRSBD (at ØF523H) Ø2H bytes Type: x
- Used to save the user stack pointer during resident BDOS (RBDOS) processing.
- See 3.2, "BDOS Operations."

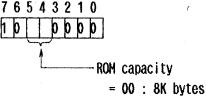
RIOBYTE (at 0F529H) 01H byte Type: #
- Used to store the current IOBYTE (the contents of address 0003H) when a resident BDOS or BIOS (RBDOS or RBIOS) function is called.



- See 3.9, "I/O Byte."

```
ERRFLG (at 0F52AH) 01H byte Type: #
- This flag indicates whether or not SETERR has been executed
during BDOS error recovery processing.
             Normal error recovery processing (message output)
     = ØFFH: Special error recovery processing (return code)
- See 3.2, "BDOS Operations."
BIOSERROR (at ØF52BH) ØlH byte Type: #
- Loaded with the return information at the end of a BIOS disk
access.
     = ØØH:
              Normal termination
     = ØlH: Read error
     = Ø2H:
              Write error
     = Ø3H:
              Write protect error
     = Ø4H:
              Time-out error
     = Ø5H:
              Seek error
     = Ø6H:
            Break error
     = Ø7H:
              Power off error
     = Ø8H:
             Mount error
     = ØFEH: Other errors
- See 3.2.4, "BDOS Errors."
OLDBNK (at ØF52CH) ØlH byte Type: #
- Used to store bank information when a resident BIOS (RBIOS)
function is called.
     = ØFFH:
              System bank (OS ROM)
     = ØØH:
              Bank Ø (RAM)
     = Ø1H:
              Bank 1 (ROM capsule 1)
              Bank 2 (ROM capsule 2)
     = 02H:
- See 4.4, "Bank Switching."
LSORBNK (at ØF52DH) ØlH byte Type: x
- Used to store bank information of the destination to which data
is transferred by a LDIRXX call.
DISBNK (at ØF52EH) ØlH byte Type: o
- Used to specify the bank when calling BIOS CALLX or JUMPX.
     = ØFFH: System bank (OS ROM)
     = ØØH:
              Bank Ø (RAM)
     = Ø1H:
              Bank 1 (ROM capsule 1)
     = Ø2H:
              Bank 2 (ROM capsule 2)
- See (29) CALLX in 3.4.2.
CALBNK (at ØF52FH) ØlH byte Type: x
- Used to save bank information before bank switching when
calling CALLXX.
BNKRGS (at 0F530H) 01H byte Type: #
- Bank data used in bank switch processing to switch the active
bank to system bank.
- This value is usually fixed at 00H.
- See 4.4, "Bank Switching."
BNKRGl (at ØF531H)
                   ØlH byte Type: #
- Bank data used in bank switch processing to switch the active
bank to bank 0.
- This value is usually fixed at 40H.
- See 4.4, "Bank Switching."
```

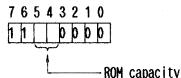
BNKRG2 (at ØF532H) ØlH byte Type: #
- Bank data used in bank switch processing to switch the active bank to bank 1.



= 01 : 16K bytes = 10 : 32K bytes

- When no ROM is installed, 8K bytes of ROM is assumed.
- See 4.4, "Bank Switching."

BNKRG3 (at ØF533H) ØlH byte Type: #
- Bank data used in bank switch processing to switch the active bank to bank 2.



= 00 : 8K bytes

= 01 : 16K bytes

= 10 : 32K bytes

- When no ROM is installed, 8K bytes of ROM is assumed.
- See 4.4, "Bank Switching."

CURBNK (at 0F534H) 01H byte Type: #

- Loaded with information concerning the bank on which the system is currently operating.
  - = ØFFH: System bank (OS ROM)
  - = ØØH: Bank Ø (RAM)
  - = 01H: Bank 1 (ROM capsule 1)
  - = 02H: Bank 2 (ROM capsule 2)
- See 4.4, "Bank Switching."

USRSBI (at ØF535H) Ø2H bytes Type: x

- Used to save the user stack pointer during resident BIOS (RBIOS) processing.
- See 3.3, "BIOS Operations."

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BIOSFN (at ØF537H) Ø2H bytes Type: x - Stores the logical number of the user-called BIOS function during resident BIOS (RBIOS) processing. - See 3.3, "BIOS Operations."

ROMEXQON (at  $\emptyset$ F539H)  $\emptyset$ lH byte Type: x - This flag is used to determine whether or not ROM-based processing is to be executed.

= 00H: ROM-based processing must not be executed.

= 01H: ROM-based processing must be executed.

- See 4.6, "Executing a ROM Program."

ROMEXBNK (at ØF53AH) Ø1H byte Type: x

- Loaded with bank information when transferring control to a ROM-based program.

- See 4.6, "Executing a ROM Program."

ROMEXADD (at 0F53BH) 02H bytes Type: x

- Loaded with the processing starting address when transferring control to a ROM-based program.

- See 4.6, "Executing a ROM Program."

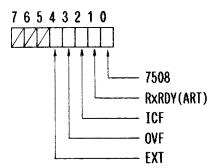
RZBANKR (at ØF53DH) Ø1H byte Type: o

- Stores the bank register (PØ5H) output status.



- The bit assignments for this area are identical to those for BANKR (P $\emptyset$ 5H).
- See 4.4, "Bank Switching."

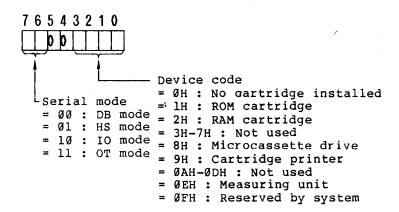
RZIER (at 0F53EH) 01H byte Type: o - Stores the interrupt enable register (P04H) output status.



(Interrupt enabled with each bit set to 1)

- The bit assignments for this area are identical to those for IER (PØ4H).
- See 4.7, "Interrupts."

CRGDEV (at 0F53FH) 01H byte Type: # - Loaded with the device code of the installed cartridge.



- See 5.1, "Cartridges."

SAVEIX (at 0F540H) 02H bytes Type: x - Used to save the contents of the IX register when a BIOS function is called. - See 3.3.3, "BIOS Hook."

SAVEIY (at 0F542H) 02H bytes Type: x
- Used to save the contents of the IY register when a BIOS function is called.
- See 3.3.3, "BIOS Hook."

IMSTP (at 0F544H) 01H byte Type: x
- Used in keyboard interrupt processing to store the input key code.
- See 3.5, "Keyboard."

WPFKTBL (at 0F545H) A0H bytes Type: o - PF key definition table.

	1byte	15byte
PF1	Number of 5	Character string
PF2	characters l	Character string
PF10	Number of	Character string

- The number of characters is specified within the range of 00H to 0FH. 00H indicates that the PF key is not defined.
- The 160 data bytes starting at PFKTAB (0F02DH) are copied into this area at warm boot time.
- See 3.5.3, "Standard Keyboard."

SEKDSK (at 0F5E5H) 01H byte Type: x

- Loaded by BIOS SELDSK with the physical disk number.
- See 3.4, "BIOS Details."

SEKTRK (at ØF5E6H) Ø2H bytes Type: x

- Loaded by BIOS SETTRK with the specified track number.
- See 3.4, "BIOS Details."

SEKSEC (at ØF5E8H) 01H byte Type: x

- Loaded by BIOS SETSEC with the specified sector number.
- See 3.4, "BIOS Details."

HSTDSK (at ØF5E9H) ØlH byte

02H bytes HSTTRK (at ØF5EAH)

HSTSEC (at ØF5ECH) 01H byte

SEKHST (at ØF5EDH) ØlH byte

HSTACT (at ØF5EEH) ØlH byte

HSTWRT (at ØF5EFH) 01H byte UNACNT (at ØF5FØH)

01H byte UNADSK (at ØF5F1H)

01H byte UNATRK (at ØF5F2H) 02H bytes

UNASEC (at ØF5F4H) 01H byte

ERFLAG (at ØF5F5H) **ØlH** byte

RSFLAG (at ØF5F6H) 01H byte

READOP (at ØF5F7H) ØlH byte

WRTYP (at ØF5F8H) 01H byte

DMAADR (at F5F9H) 02H bytes Type: #

- DMA address set at time of disk Read/Write.
- Normally points to SYSDMA (F8B1H). See 3.8, "Disk".

DIRBUF (at ØF5FBH) 80H bytes Type: #
- DMA buffer for directory access.
- This area is pointed to by the directory buffer pointer in the disk parameter header (F150H - )
- See 3.8, "Disk".

ALVO (at ØF67BH) 20H bytes Type: x - Allocation area for RAM disk use. - See 3.8, "Disk"

- See 3.0, DISK

CSVO (at ØF69BH) ØØH bytes
- Checksum area for RAM disk use.
 (Label name only secured)
- See 3.8, "Disk".

ALV1 (at 0F69BH) 09H bytes type: x
- Allocation area for ROM capsule 1 use.
- See 3.8, "Disk"

CSV1 (at ØF6A4H) ØØH bytes
- Checksum area for ROM capsule 1 use.
 (Label name only secured)
- See 3.8, "Disk".

ALV2 (at ØF6A4H) Ø9H bytes Type: x - Allocation area for ROM capsule 2 use. - See 3.8, "Disk".

CSV2 (at ØF6ADH) ØØH bytes
- Checksum area for ROM capsule 2 use.
(Label name only secured)

- See 3.8, "Disk".

ALV3 (at ØF6ADH) 12H bytes Type: x - Allocation area for disk drive 1 use - See 3.8, "Disk".

CSV3 (at ØF6BFH) lØH bytes Type: x - Checksum area for disk drive l use. - See 3.8, "Disk".

ALV4 (at ØF6CFH) 12H bytes Type: x - Allocation area for disk drive 2 use - See 3.8, "Disk".

CSV4 (at ØF6ElH) 10H bytes Type: x
- Checksum area for disk drive 2 use.
- See 3.8, "Disk".

ALV5 (at ØF6F1H) 12H bytes type: x - Allocation area for disk drive 3 use

- See 3.8, "Disk".

CSV5 (at ØF703H) 10H bytes Type: x - Checksum area for disk drive 3 use. - See 3.8, "Disk".

ALV6 (at ØF713H) 12H bytes Type: x - Allocation area for disk drive 4 use - See 3.8, "Disk".

CSV6 (at ØF725H) 10H bytes Type: x - Checksum area for disk drive 4 use. - See 3.8, "Disk".

ALV7 (at 0F735H) 08H bytes Type: x - Allocation area for microcassette use. - See 3.8, "Disk".

CSV7 (at ØF73DH) 10H bytes Type: x Checksum area for microcassette use. - See 3.8, "Disk".

ALV8 (at ØF74DH) Ø8H bytes type: x Allocation area for RAM cartridge use. - See 3.8, "Disk".

CSV8 (at ØF755H) Ø4H bytes Type: x Checksum area for RAM cartridge use. - See 3.8, "Disk".

ALV9 (at ØF759H) Ø8H bytes Type: x Allocation area for ROM cartridge l use. - See 3.8, "Disk".

CSV9 (at ØF761H) ØØH bytes Checksum area for ROM cartridge l use. (Label name only secured.) - See 3.8, "Disk".

ALV10 (at 0F761H) 08H bytes Type: x Allocation area for ROM cartridge 2 use. - See 3.8, "Disk".

CSV10 (at 0F769H) 00H bytes Checksum area for ROM cartridge 2 use. - See 3.8, "Disk".

HCX (at ØF769H) ØlH byte Type: x
- During execution of screen dump, this location is the
work area which stores the X coordinate for the VRAM being
dumped.
- See 3.4.2 (19) SCRN DUMP

HCY (at 0F76AH) 01H byte
- During execution of screen dump, this location is the work area which stores the Y coordinate for the VRAM being dumped.
- See 3.4.2 (19) SCRN DUMP

HCN (at ØF76BH) ØlH byte

HCDATA (at ØF76CH) Ø8H bytes
- During execution of screen dump, these locations are the work area used for editing the bit image data output to the printer.
- See 3.4.2 (19) SCRN DUMP

LSTERR (at ØF773H) ØlH byte Type: #

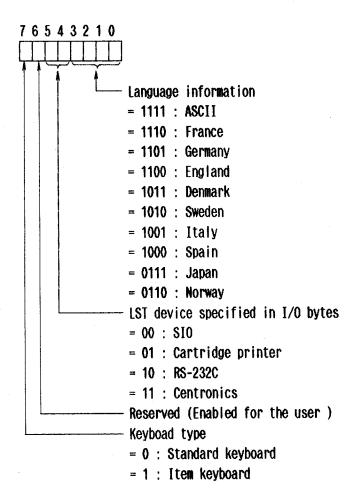
- Indicates whether or not screen dump processing has been interrupted by the CTRL/STOP keys.

- = 00H: Normal termination.
- See (19) SCRNDUMP in 3.4.2.

PRINTER (at ØF774H) ØlH byte

YKCOUNTRY (at ØF775H) ØlH byte Type: #

- Used to store the DIP switch state which is read at boot time.



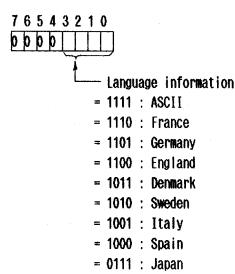
<sup>-</sup> See 7.2, "DIP Switches."

<sup>-</sup> In OS Kana Vl.0, ASCII, England and Japan are valid. The LST: (01) device is assigned to LCD.

<sup>-</sup> In OS Kana V2.0, only Japan is valid.

<sup>-</sup> In ASCII version OS 1.0, all countries except Japan are valid.

YLDFLTC (at ØF776H) ØlH byte Type: o - Loaded with the default value for LCD screen display.



- This area is loaded with the language information which is specified with the DIP switches at boot time and copied into YLCOUNTRY (ØF777H) at WBOOT time. - See 7.2, "DIP Switches."

= 0110 : Norway

YLCOUNTRY (at ØF777H) ØlH byte Type: o - This flag specifies the language of the characters to be displayed on the LCD screen. - The value of YLDFLTC (ØF776H) is copied into this area at warm

boot time.

- See 3.6, "LCD Display (CONOUT Details)."

RAMSIZE (at ØF778H) 02H bytes

YSIZERAM (at ØF77AH) ØlH byte Type: # - Indicates the RAM disk size in K bytes. - See 3.8, "Disk Storage."

TIMEND (at ØF77CH) Ø2H bytes Type: x - Used to store the auto power off time.

- See 2.8, "Auto Power-off."

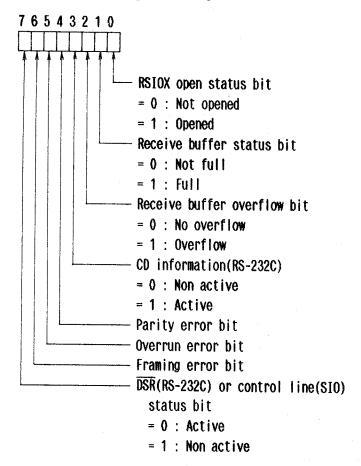
SRBADR (at ØF77EH) Ø9H bytes Type: x

- Used as the RSIOX parameter area for BIOS PUNCH or READER.

- When BIOS PUNCH or READER is first called, RSIOX copies the 9-byte data from SRSADR (ØEF31H) into this area and executes open processing using this area. Subsequently, this area is used as the RSIOX parameter.

- See 3.4, "BIOS Details."

RSPSTS (at ØF787H) ØlH byte Type: # - Indicates the BIOS RSIOX processing status.



(Error bits (bits 6 to 4) are set to 1 when the corresponding error occurs.)

- Bits 7 and 3 are set when RSIOX is executed and the other bits are set when an interrupt occurs.
RSPRBGP (at ØF788H) Ø2H bytes Type: #

RSPRBGP (at 0F788H) 02H bytes Type: # - Pointer to the receive buffer area from which RSIOX gets data.

- See (23) RSIOX in 3.4.2.

RSPRBPP (at ØF78AH) Ø2H bytes Type: #

- Pointer to the receive buffer area to which RSIOX puts data.

- See (23) RSIOX in 3.4.2.

RSPRBAD (at 0F78CH) 02H bytes Type: #
- Indicates the RSIOX receive buffer starting address (parameter specified at open time).
- See (23) RSIOX in 3.4.2.

RSPRBSZ (at ØF78EH) Ø2H bytes Type: #
- Indicates the RSIOX receive buffer size (parameter specified at open time).
- See (23) RSIOX in 3.4.2.

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RSPBITR (at 0F790H) 01H byte Type: #
- Indicates the transmission speed (parameter specified at open time).

Value	Speed (BPS)	Value	Speed (BPS)
Ø 2H	110	ØDH	4800
Ø4H	150	ØEH	9600
Ø5H	200	ØFH	19200
Ø6H	300	10H	38400
Ø8H	600	8ØH	75/1200
ØAH	1200	81H	1200/75
ØСН	2400		

- See (23) RSIOX in 3.4.2.

RSPBITL (at ØF791H) Ø1H byte Type: #

- Indicates the bit length specified by RSIOX (parameter specified at open time).
  - = 02H: 7 bits/character
  - = 03H: 8 bits/character
- See (23) RSIOX in 3.4.2.

RSPPAR (at ØF792H) Ø1H byte Type: #

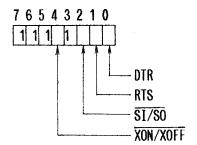
- Indicates the parity mode specified by RSIOX (parameter specified at open time).
  - = 00H: No parity
  - = 01H: Odd parity
  - = 03H: Even parity
- See (23) RSIOX in 3.4.2.

RSPSTOPB (at ØF793H) ØlH byte Type: #

- Contains the number of stop bits specified by RSIOX (parameter specified at open time).
  - = 01H: 1 stop bit
  - = 03H: 2 stop bits
- See (23) RSIOX in 3.4.2.

RSPSPP (at ØF794H) ØlH byte Type: #

- Contains the special parameter specified by RSIOX (specified at open time) status.



(DTR and RTS controls are enabled when the corresponding flag bit is set, and  $\overline{SI/SO}$  and  $\overline{XON/XOFF}$  controls are enabled when reset.)

- See (23) RSIOX in 3.4.2.

RSRBEAD (at 0F795H) 02H bytes Type: # - Indicates the lower-limit address of the receive buffer used by RSIOX.

RSRBEAD = RSPRBAD (buffer address) + RSPRBSZ (buffer size) - See (23) RSIOX in 3.4.2.

RSXONSZ (at ØF797H) Ø2H bytes Type: #
- Indicates the number of receive data bytes when an XON code is to be sent during RSIOX XON/XOFF processing.

RSXONSZ = RSPRBSZ (buffer size) / 4

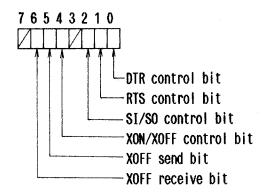
- See (23) RSIOX in 3.4.2.

RSXOFSZ (at 0F799H) 02H bytes Type: #
- Indicates the number of receive data bytes when an XOFF code is
to sent during RSIOX XON/XOFF processing.
RSXOFSZ = RSPRBSZ (buffer size) - RSXONSZ (XON size)

- See (23) RSIOX in 3.4.2.

CHRMSK (at 0F79BH) 01H byte Type: #
- Used by RSIOX to specify the receive data mask pattern.
= 7FH: 7 bits/character data
= 0FFH: 8 bits/character data
- See (23) RSIOX in 3.4.2.

RSSSPP (at ØF79CH) ØlH byte Type: # - Used by RSIOX to indicate the transmit/receive control status.



(Each bit is set to 1 when the corresponding control is enabled.)

- See (23) RSIOX in 3.4.2.

RSPAKAD (at ØF79DH) Ø2H bytes Type: #

- Loaded by RSIOX with contents the HL register.
- See (23) RSIOX in 3.4.2.

RSRDL (at ØF79FH) Ø2H bytes Type: #

- Indicates the number of data bytes stored in the receive buffer by RSIOX.
- See (23) RSIOX in 3.4.2.

SISOCNT (at ØF7AlH) Ø2H bytes Type: #

- Indicates the number of SI and SO receive codes stored in the receive buffer when SI/SO processing is specified with RSIOX.
- See (23) RSIOX in 3.4.2.

SSXMODE (at ØF7A3H) Ø1H byte Type: #

- Indicates the  ${\rm SI/SO}$  send state when  ${\rm SI/SO}$  processing is specified with M.
  - = 00H: SI send state
  - = 10H: SO send state
- See (23) RSIOX in 3.4.2.

RSXMODE (at ØF7A4H) ØlH byte Type: #

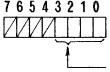
- Indicates the SI/SO receive state when SI/SO processing is specified with RSIOX.
  - = 00H: SI receive state
  - = 80H: SO receive state
- See (23) RSIOX in 3.4.2.

RSFDEV (at ØF7A5H) ØlH byte Type: x

- Used to store the function code (bits 3-0 in the B register) of RSIOX.
- See (23) RSIOX in 3.4.2.

RSODEV (at ØF7A6H) ØlH byte Type: #

- Loaded by RSIOX with the device status (open status).



- = 0 : RS-232C

= 1 : SIO

= 2 : RS-232C input , SIO output

= 3 : Cartridge SIO

= F : Closed

- See (23) RSIOX in 3.4.2.

RSCALSW (at ØF7A7H) ØlH byte

RSBYTE (at ØF7A8H) 01H byte EPWKTP (at ØF7A9H) 05H bytes Type: x - Used to store FMT, DID, SID, FNC and SIZ when sending EPSP data. - See 5.3, "Terminal Floppy (TF)." ØlH byte Type: x EPACKC (at ØF7AEH) - Used to store the ACK or NAK to be sent to the terminal floppy when sending/receiving EPSP data. - See 5.3, "Terminal Floppy (TF)." EPBLCN (at ØF7AFH) 01H byte EPERMD (at ØF7BØH) ØlH byte REGA (at ØF7BlH) ØlH byte Type: x - The work area used to specify the read/write mode when accessing the ROM cartridge, RAM cartridge, or external RAM disk. RØ (at ØF7B2H) 12H bytes Type: x - A work area used by the system when sending/receiving EPSP data. OLDDVMD (at ØF7C4H) Ø1H byte Type: x - Used to store the device code of the cartridge set at power off time. BEEPBASE (at ØF7C5H) ØlH byte Type: x - The work area used during BIOS BEEP processing to measure the beep time. LCHRFONT (at ØF7C6H) Ø8H bytes Type: x - The work area used during BIOS CONOUT processing to get font data from the character generator. - See 3.6, "LCD Display (CONOUT Details)." TOSRCD (at ØF7CEH) Ø1H byte Type: # - Loaded with a MTOS return code. = 00H: Normal termination = 01H: Not removed = 02H: Not mounted = 03H: Cannot remove = Ø4H: Cannot mount = 05H: Directory full =  $\emptyset6H$ : R/O file = 07H: File already exists = Ø8H: File not found = 09H: File already open = ØAH: File not open = ØBH: Record number error = ØCH: EOF reached = ØDH: Random access error = ØEH: Not used = ØFH: R/O drive error

- See 3.7.5, "MTOS Functions."

= 12H: Auto remove check error

= 10H: Verify error
= 11H: File number error

1

IOSRCD (0F7CFH) 01H byte Type: # - Loaded with the MIOS return code.

= 00H: Normal termination

= ØlH: Head error

= 02H: Motor stop error

= 03H: Write protect error

= Ø4H: Data error

= Ø5H: CRC error

= 06H: Block mode error

= 07H: Tape error

= Ø8H: Mount error

- See 3.7.6, "Using MIOS."

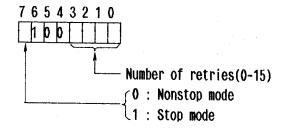
CURMCT (0F7D0H) 01H byte Type: x

- Loaded with the MCT drive code when MCT is selected as the current drive.

- See 3.7, "MTOS/MIOS Operations."

TACATR (0F7DlH) 01H byte Type: o

- Specifies the stop/nonstop mode and the number of retries during tape accessing.



- The value of DFTATR ( $\emptyset$ F2E4H) is loaded into this area at warm boot time.
- See 3.7.4, "Using MTOS."

TACMOD (ØF7D2H) Ø1H byte Type: #

- Loaded with tape access attributes.

- TACMOD is initially set to one of the following values:
- 1) During file creation:

Unconditionally set to the value of TACATR (ØF7D1H).

2) When TOSCTL (ØEFBBH), bit 5 is Ø:

Set to the value of file attribute 1 in the RAM directory.

3) When TOSCTL (ØEFBBH), bit 5 is 1: Set to the value of TACATR (ØF7D1H).

- See 3.7.4, "Using MTOS."

BLKNO (ØF7D3H) Ø2H bytes Type: #

- Loaded with the current block number during MTOS processing.

- See 3.7, "MTOS/MIOS Operations."

RECNO (ØF7D5H) Ø2H bytes Type: #

- Loaded with the current record number during MTOS processing.

- See 3.7, "MTOS/MIOS Operations."

BLKREC (ØF7D7H) Ø2H bytes Type: # - Loaded with the first record number in the TOSDMA buffer during MTOS processing. - See 3.7, "MTOS/MIOS Operations." RECEXT (ØF7D9H) ØlH byte Type: # - This flag indicates whether or not records exist in the TOSDMA buffer during MTOS processing. = 00H: No record present. = 01H: First record present. = Ø2H: Second record present. = 03H: Two records present. - See 3.7, "MTOS/MIOS Operations." ORECEXT (ØF7DAH) Ø1H byte Type: x - This flag indicate whether or not old records exist in the TOSDMA buffer. - See 3.7, "MTOS/MIOS Operations." DIRPNT (@F7DBH) @1H byte Type: # - Loaded with the directory file counter value of the file currently being processed by MTOS. - See 3.7, "MTOS/MIOS Operations." FILPNT (@F7DCH) @1H byte Type: # - Loaded with the pointer value, in the directory file, of the file that is currently being processed by MTOS. - See 3.7, "MTOS/MIOS Operations." SRCADD (0F7DDH) 02H bytes Type: x - Loaded with the T-FCB starting address during MTOS file search. - See 3.7, "MTOS/MIOS Operations." MAXBLK (@F7DFH) @2H bytes Type: # - Loaded with the maximum block number in the file that is currently being processed by MTOS. - See 3.7, "MTOS/MIOS Operations." MAXREC (0F7E1H) 02H bytes Type: # - Loaded with the maximum record number in the file that is currently being processed by MTOS. - See 3.7, "MTOS/MIOS Operations." REMFLG (ØF7E3H) Ø1H byte Type: # - This flag indicates whether or not an actual write to the tape is necessary during MTOS remove processing. = 00H: Write necessary. = Nonzero: Write not necessary (directory is updated). - See 3.7, "MTOS/MIOS Operations." SKCKCT (0F7E4H) 0lH byte Type: x - Loaded with the number of rewrites to be made when an error occurs during MTOS seek processing. - See 3.7, "MTOS/MIOS Operations." LSTCNT (0F7E5H) 02H bytes Type: # - Loaded with the last tape count during MCT processing by MTOS. - See 3.7, "MTOS/MIOS Operations."

USEKCNT (0F7E7H) 02H bytes Type: o - Loaded with the seek counter value specified by the user using MTOS.

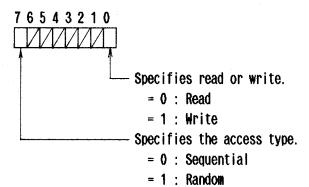
- IDFLG (0FA13H), bit 6 determines whether the last free area counter value is to be obtained from the directory or USEKCNT.

Bit 6 = Ø: Directory

= 1: USEKCNT

- See 3.7, "MTOS/MIOS Operations."

RWMOD (0F7E9H) 01H byte Type: x - Loaded with the tape access mode (read/write) during MTOS processing.



- See 3.7, "MTOS/MIOS Operations."

ALCVEC (0F7EAH) 08H bytes Type: #

- Loaded with the MTOS allocation vector.

- See 3.7, "MTOS/MIOS Operations."

REGBC (0F7F2H) 02H bytes Type: x
- The work area for saving the BC register during MTOS processing.
- See 3.7, "MTOS/MIOS Operations."

REGDE (0F7F4H) 02H bytes Type: x
- The work area for saving the DE register during MTOS processing.
- See 3.7, "MTOS/MIOS Operations."

BSTCNT (0F7F6H) 02H bytes Type: x
- Loaded with the block starting tape count during a MIOS block read.
- See 3.7, "MTOS/MIOS Operations."
RNDNO (0F7F8H) 02H bytes

RNDCNT (ØF7FAH) Ø2H bytes

MCTSVDAT (0F7FCH) 20H bytes Type: x
- The work area for saving system data on the MCT cartridge in RAM at power-off time.
- See 3.7, "MTOS/MIOS Operations."

### YIDVAL (0F81DH) 01H byte Type: x

- Loaded with the offset value, in the index table, of the key that is used to change the international character set specification.

- See 3.5, "Keyboard."

(Reserved) (ØF81EH) 42H

### 6.2.6 System Area V (RSYSAR5)

Buffers and stack areas that do not need to be initialized are reserved in this area.

KBUF (0F860H) 21H bytes Type: x

- The buffer for storing a key entry made through a 7508 keyboard interrupt.

- See 3.5, "Keyboard."

KBUFEND (ØF881H) Ø1H byte Type: x

- Loaded with the KBUF last position.

- See 3.5, "Keyboard."

TIMBUF (0F882H) 0BH bytes

SYSFCB (0F88DH) 24H bytes Type: x

- The area into which the user-specified FCB data is to be copied during BDOS or BIOS processing.

- See 3.2, "BDOS Operations."

SYSDMA (ØF8BlH) 80H bytes Type: x

- The area into which the contents of the user-specified DMA buffer are to be copied during BDOS or BIOS processing.
- See 3.2, "BDOS Operations."

PKT TOP (ØF931H) Ø9H bytes Type: x

- The area through which EPSP system data is sent or received during EPSP data transmission.

- See 5.3, "Terminal Floppy (TF)."

SCRCH BUF (ØF93AH) 80H bytes Type: x

- The system scratch buffer for disk accessing.

- See 3.3, "BIOS Operations."

MCTDTSV (ØF9BAH) 38H bytes

```
IDTOP (09E2H) 35H bytes Type: #
- The area for storing tape ID field data during MTOS processing.
- See 3.7, "MTOS/MIOS Operations."
- IDTOP consists of the following fields:
     TAPNAM (Ø8H bytes)
     - Tape name (ASCII code) TAPVOL (Ø2H bytes)
     - Tape volume number
     TAPPAS (Ø8H bytes)
     - Not used
     MAKMON
            (02H bytes)
     - The month in which the tape was created (ASCII code)
            (02H bytes)
     - The day on which the tape was created (ASCII code)
     MAKYEA (02H bytes)
     - The year in which the tape was created (ASCII code)
     MAKHOU (02H bytes)
     - The hour at which the tape was created (ASCII code)
             (Ø2H bytes)
     - The minute at which the tape was created (ASCII code)
             (02H bytes)
     - The second at which the tape was created (ASCII code)
             (02H bytes)
     - The month in which the tape was last removed (ASCII code)
            (02H bytes)
     - The day on which the tape was last removed (ASCII code)
     REMYEA (02H bytes)
     - The year in which the tape was last removed (ASCII code)
     REMHOU (Ø2H bytes)
     - The hour at which the tape was last removed (ASCII code)
     REMMIN
             (Ø2H bytes)
     - The minute at which the tape was last removed (ASCII code)
     REMSEC (02H bytes)
     - The second at which the tape was last removed (ASCII code)
     TOTMNT
            (02H bytes)
     - Total number of mounts.
     TOTBNO
             (02H bytes)
     - Total number of blocks.
     TOTRNO
             (02H bytes)
     - Total number of records.
     TOTFNO (01H byte)
     - Total number of files.
     IDFLG (01H byte)
     - Tape ID flag
     TCNTTP
            (01H byte)
     - Tape TOS controller
     LSTFNO
            (02H bytes)
     - File number of the last file on the tape
DIRTOP (ØFA17H) 180H bytes Type: #
```

The area for storing tape directory data (RAM directory) during MTOS processing.

This area can contain up to 12 directories, each of which consists of 32 bytes.

See 3.7, "MTOS/MIOS Operations."

```
TOSBUF (ØFB97H) 104H bytes Type: x
- DMA buffer used by MTOS.
- See 3.7, "MTOS/MIOS Operations."
COMBUF (ØFC9BH) FØH bytes Type: x
- System serial data receive buffer used during BIOS PUNCH or
READER execution.
- See 3.4, "BIOS Details."
(Reserved) (ØFD8BH) 15H bytes
BDOSSK (ØFF8FH) 70H bytes Type: x
- Stack area for BDOS
- See 3.2, "BDOS Operations."
BIOSSK (ØFF1FH) 5CH bytes Type: x
- Stack area for BIOS
- See 3.3, "BIOS Operations."
SP7508 (0FEC3H) 6CH bytes
                           Type: x
- Stack area for 7508 interrupts
- See 4.7, "Interrupts."
SP8251 (ØFE57H) 2CH bytes Type: x
- Stack area for ART interrupts
- See 4.7, "Interrupts."
SPOVF (0FE2BH) 30H bytes Type: x
- Stack area for OVF interrupts
- See 4.7, "Interrupts."
SPICF (ØFDFBH) 10H bytes Type: x
- Stack area for ICF interrupts
- See 4.7, "Interrupts."
SPEXT (ØFDEBH) 10H bytes Type: x
- Stack area for EXT interrupts
- See 4.7, "Interrupts."
STRTSP (ØFDDBH) 3CH bytes Type: x
- Stack area for system address Ø start processing
STKBOT (ØFD9FH) ØØH byte
```