

PTR
RATWRT15
10/20/81

** MONITOR REQUESTS

*

* THESE SYMBOLS DEFINE THE NUMBER PASSED IN THE C REGISTER
 * WHEN A MONITOR REQUEST IS MADE.

* ~~SCSR~~ 3 *write to Printer*

M. DSPCHR	EQU	6	DISPLAY CHARACTER
M. DSPSTR	EQU	9	DISPLAY STRING
M. OSEXIT	EQU	0#0C	OS EXIT TO MONITOR
M. KBSTAT	EQU	0#0F	GET KEYBOARD STATUS
M. KBCHNE	EQU	0#012	READ KEYBOARD W/O ECHO
M. KBCHAR	EQU	0#15	READ 1 CHARACTER FROM KEYBOARD
M. KBLINE	EQU	0#18	READ LINE FROM KEYBOARD
M. DSPTXT	EQU	0#1B	DISPLAY TEXT ARRAY
M. DSKADR	EQU	0#1E	CONVERT DISK ADDRESS
M. DSKSRK	EQU	0#21	SEEK DISK <i>Read clock</i>
M. DSKRD	EQU	0#24	READ DISK
M. DSKWRT	EQU	0#27	WRITE DISK
M. DSKSTT	EQU	0#2A	CHECK STATUS
M. SRSTAT	EQU	0#2D	GET SERIAL INTERFACE STATUS
M. SRRD	EQU	0#30	READ CHARACTER FROM SERIAL INTERFACE
M. SRWRT	EQU	0#33	WRITE CHARACTER TO SERIAL INTERFACE
M. SRCTL	EQU	0#36	SERIAL INTERFACE CONTROL FUNCTION

M. RDCLK

** DISK REQUEST BLOCK

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* ALL MONITOR REQUESTS FOR DISK I/O REQUIRE A REQUEST BLOCK,
 * WHOSE ADDRESS IS PASSED IN HL. THIS IS THE FORMAT
 * OF THAT BLOCK.

DRQUNT	BYTE	8	UNIT NUMBER
	FIELD		
DRQTRK	BYTE	1	TRACK NUMBER
	FIELD	8	
	BYTE	1	
	FIELD	8	RESERVED FOR UPPER TRACK NUMBER
DRQSEC	BYTE	1	SECTOR NUMBER
	FIELD	8	
DRQFMT	BYTE	1	DISK FORMAT
	FIELD	8, NA	
	FIELD	2	UNUSED (ZERO)
DRQMAP	FIELD	2	MAPPING CODE
MAPCPM	VALUE	1	CP/M 1.4 SECTOR MAPPING
MAPUCSD	VALUE	2	UCSD STANDARD (DEC RK-12)
MAPOPT	VALUE	3	OPTIMIZED MAPPING
	FIELD	1	RESERVED FOR TYPE
DRQDDN	FIELD	1	DOUBLE-DENSITY
DRQSSZ	FIELD	2	SECTOR SIZE
RQSI1	VALUE	0	128 BYTES PER SECTOR

RQSIZE	VALUE	1	256 BYTES
RQSIZE	VALUE	2	512 BYTES
	BYTE	1	
DRQFLG	FIELD	8, NA	FLAG BYTE
DRQASY	FIELD	1	ASYNCHRONOUS REQUEST
DRQNRC	FIELD	1	DO NOT RECOVER DATA ERRORS
DRQNMA	FIELD	1	DO NOT ADVANCE MEMORY ADR
DRQNDA	FIELD	1	DO NOT ADVANCE DISK ADR
DRQMSR	FIELD	1	MULTI-SECTOR REQUEST
	FIELD	3	UNUSED
	BYTE	1	
DRQSO	FIELD	8	START OF CURRENT LOGICAL TRACK
	BYTE	1	
	FIELD	8	RESERVED
	BYTE	1	
DRQADR	FIELD	8, NA	16-BIT MEMORY ADDRESS
DRQADL	FIELD	8	LOW ADDRESS BYTE
	BYTE	1	
DRQADH	FIELD	8	HIGH ADDRESS BYTE
	BYTE	1	
DRQCNT	FIELD	8	SECTOR COUNT

** ERROR CODES

*
* THESE CODES ARE RETURNED IN THE A REGISTER AFTER
* DISK I/O REQUESTS ARE PROCESSED.
*

E. NOERR	EQU	0	NO ERROR
E. UNKERR	EQU	0#10	UNKNOWN ERROR
E. PRMERR	EQU	0#20	PARAMETER ERROR
E. UNTRDY	EQU	0#30	UNIT NOT READY
E. WTPROT	EQU	0#31	WRITE PROTECTED MEDIA
E. DSKCHG	EQU	0#32	VOLUME HAD BEEN CHANGED
E. ADCOMP	EQU	0#40	ADDRESS COMPARE ERROR
E. URDTER	EQU	0#41	UNRECOVERABLE DATA ERROR
E. RTZERR	EQU	0#50	ERROR DURING RTZ OPERATION
E. LSTDAT	EQU	0#51	LOST DATA
E. WRTFLT	EQU	0#52	WRITE FAULT
E. CNTERR	EQU	0#53	CONTROLLER HARDWARE ERROR

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**      MACRO MTRREQ - MAKE MONITOR REQUEST
*
*      CALL - THE SINGLE PARAMETER IS THE REQUEST NUMBER.
*             ANY REGISTERS MUST BE ALREADY SET UP.
*
*      NOTE - THIS MACRO USES THE RST 40 VECTOR IN LOW MEMORY.
*             THIS MACRO SHOULD BE REDEFINED IN ANY PROGRAM
*             THAT CHANGES THAT VECTOR.

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MTRREQ      MACRO      RQST
             LDC        A, RQST
             CALL       0#D006
MTRREQ      ENDM

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**      MACRO STRNGB - MARK THE BEGINNING OF A STRING
*
*      CALL - LOCATION FIELD CONTAINS STRING NAME
*
*      MACRO      STRNGB, NAME
NAME         DATA      E_NAME--1
STRNGB       ENDM

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**      MACRO STRNGE - MARK THE END OF A STRING
*
*      CALL - LOCATION FIELD CONTAINS STRING NAME
*
*      MACRO      STRNGE, NAME
E_NAME       NOREF      E_NAME
STRNGE       EQU        *
STRNGE       ENDM

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**      DISPLAY CONTROL CODES
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*
CH. LEFT     EQU        CH. BS      MOVE CURSOR LEFT
CH. RITE     EQU        CH. FS      MOVE CURSOR RIGHT
CH. UP       EQU        CH. US      MOVE CURSOR UP
CH. DOWN     EQU        CH. LF      MOVE CURSOR DOWN

CH. HOME     EQU        CH. EM      MOVE CURSOR TO HOME POSITION
CH. CLR      EQU        CH. SI      CLEAR ENTIRE SCREEN
CH. EEOL     EQU        CH. GS      ERASE TO END OF LINE

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