

7990	EF3E	AE7EF3	LDX STKTMP	RESET STK PNT
8000	EF41	CA	DEX	
8010	EF42	CA	DEX	
8020	EF43	9A	TXS	
8030	EF44	4C3708	JMP \$0837	GOTO CMD MODE
8040			;	
8050			*****	
8060			;* SERIAL DRIVER INPUT *	
8070			;* \$4D96 JMP INPUT8 *	
8080			;* \$3CEO JMP INPUT3 *	
8090			;* \$38C6 .WORD INPUT6-1 *	
8100			;* \$38C4 .WORD INPUT5-1 *	
8110			;* \$OB07 JSR INPTST *	
8120			*****	
8130			;	
8140	EF47	A900	INPUT8 LDA #0	LOGICAL DEV INTRY
8150	EF49	2C	.BYTE \$2C	
8160	EF4A	A901	INPUT3 LDA #1	
8170	EF4C	4C59EF	JMP INPTV2	
8180	EF4F	EA	INPUT6 NOP	
8190	EF50	EA	NOP	
8200	EF51	A902	LDA #2	
8210	EF53	D004	BNE INPTV2	
8220	EF55	EA	INPUT5 NOP	
8230	EF56	EA	NOP	
8240	EF57	A903	LDA #3	
8250	EF59	8EB8EF	INPTV2 STX INPTX5+1	
8260	EF5C	8CBAEF	STY INPTX6+1	
8270	EF5F	8DA6EF	STA INPTX1+1	
8280	EF62	AA	TAX	
8290	EF63	BDA9F3	LDA PRNTBL,X	
8300	EF66	AA	TAX	
8310	EF67	8D65F6	STA INPTX2+1	
8320	EF6A	0A	ASL A	
8330	EF6B	A8	TAY	
8340	EF6C	CCBEF3	CPY PRNTYP	PARALLEL MODE?
8350	EF6F	B044	BCS INPTV3	-YES, EXIT
8360	EF71	A9FF	INPTV1 LDA #\$FF	XON
8370	EF73	F015	BEQ INPTX3	-YES
8380	EF75	A000	LDY #0	OUTPUT XON
8390	EF77	8C72EF	STY INPTV1+1	
8400	EF7A	98	TYA	
8410	EF7B	20A2EF	JSR INPTX8	
8420	EF7E	B9C0F3	INPTX4 LDA XON,Y	
8430	EF81	F007	BEQ INPTX3	
8440	EF83	C8	INY	
8450	EF84	20A2EF	JSR INPTX8	
8460	EF87	4C7EEF	JMP INPTX4	
8470			;	
8480	EF8A	AE8DEE	INPTX3 LDX PRNT5+1	
8490	EF8D	2061F6	JSR INPTZ1	INPUT CHAR
8500	EF90	C90D	CMP #\$0D	IS IT A CR?
8510	EF92	D023	BNE INPTX5	-NO, EXIT
8520	EF94	A000	LDY #0	
8530	EF96	B9CAF3	INPTX7 LDA XOFF,Y	XMIT XOFF
8540	EF99	F012	BEQ INPTX9	
8550	EF9B	C8	INY	
8560	EF9C	20A2EF	JSR INPTX8	
8570	EF9F	4C96EF	JMP INPTX7	

8580 ;
8590 EFA2 8DB638 INPTX8 STA PRNDAT XMIT CHAR
8600 EFA5 A900 INPTX1 LDA #0
8610 EFA7 AE6644 LDX \$4466
8620 EFAA 209AED JSR PRNTNO
8630 ;
8640 EFAD A9FF INPTX9 LDA #\$FF
8650 EFAF 8D72EF STA INPTV1+1
8660 EFB2 20A2EF JSR INPTX8
8670 EFB5 A90D INPTV3 LDA #\$0D
8680 EFB7 A200 INPTX5 LDX #0
8690 EFB9 A000 INPTX6 LDY #0
8700 EFBB 4C1E39 JMP \$391E
8710 ;
8720 EFBF 08 INPTST PHP LOCKOUT PRINT ON INPUT
8730 EFBF 48 PHA
8740 EFC0 AD0025 LDA \$2500
8750 EFC3 C903 CMP #3
8760 EFC5 F011 BEQ INPTT1
8770 EFC7 C905 CMP #5
8780 EFC9 F00D BEQ INPTT1
8790 EFCB C906 CMP #6
8800 EFCD F009 BEQ INPTT1
8810 EFCF C908 CMP #8
8820 EFD1 F005 BEQ INPTT1
8830 EFD3 68 PLA
8840 EFD4 28 PLP
8850 EFD5 4C0828 JMP \$2808
8860 ;
8870 EFD8 68 INPTT1 PLA
8880 EFD9 28 PLP
8890 EFDA 60 RTS
8900 ;
8910 ;*****
8920 ;* PRINTER DRIVER PATCHES *
8930 ;* 1/27/83 *
8940 ;*****
8950 ;
8960 EFDB E901 FFTEST SBC #1
8970 EFDD DD8BF3 CMP PAGCNT, X
8980 EFE0 60 RTS
8990 ;
9000 EFE1 BDBAF3 SETDV LDA FLAGDV, X
9010 EFE4 8D6644 STA \$4466
9020 EFE7 BDA9F3 LDA PRNTBL, X
9030 EFEA 60 RTS
9040 ;
9050 ;<<<<<<< FCERRX >>>>>>>>
9060 F370 * = FCERRX
9070 ;
9080 F370 4CD010 FCERRX JMP FCERR
9090 ;
9100 ;<<<<<<< GETBTX >>>>>>>>
9110 F373 * = GETBTX
9120 ;
9130 F373 4C1816 GETBTX JMP GETBYT
9140 ;
9150 ;<<<<<<< CHRGTX >>>>>>>>
9160 ;

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9170 F376 4CC000  CHRGETX JMP CHRGET
9180 ;
9190 ;<<<<<<<< CNTDWN >>>>>>>>
9200 F36D * = CNTDWN
9210 ;
9220 F36D 4C9FEC CNTDWN JMP CNTDN4 GOTO SEMA TIMER
9230 ;
9240 ;<<<<<<< SEMAGL+33 >>>>>>>>
9250 F321 * = SEMAGL+33
9260 ;
9270 F321 AA .BYTE $AA,$AA,$AA SETUP SEMA TBL
9270 F322 AA
9270 F323 AA
9280 ;
9290 ;<<<<<<< BUSONL >>>>>>>>
9300 F364 * = BUSONL
9310 ;
9320 F364 FF .BYTE $FF SET BUS ON LINE STATUS
9330 ;
9340 ;<<<<<<< CNTDNS >>>>>>>>
9350 F36A * = CNTDNS
9360 ;
9370 F36A 60 RTS
9380 ;
9390 ;<<<<<<< INTUP2 >>>>>>>
9400 F365 * = INTUP2
9410 ;
9420 F365 4C63FO INTUP2 JMP CNTDN5 GOTO SEMA TIMER TICK
9430 ;
9440 ;<<<<<<< $F000 >>>>>>>
9450 F000 * = $F000
9460 ;
9470 ;***** PARSE PATCH *****
9480 ;* PARSE PATCH *
9490 ;* $0E83 JMP PARSE *
9500 ;***** *****
9510 ;
9520 F000 08 PARSE PHP SAVE STATUS
9530 F001 48 PHA AND ACC.
9540 F002 ADBFF3 LDA GETBUS GET BUS?
9550 F005 F00A BEQ PARSE1 -NO, CALL SUB
9560 F007 C9B6 CMP #$B6 USR?
9570 F009 D003 BNE PARSE2 -NO, CONT
9580 F00B 8D4AF3 STA ABCSAT DISABLE ARBITC
9590 F00E 200CF8 PARSE2 JSR ARBITS GET BUS
9600 F011 68 PARSE1 PLA RESTORE REG
9610 F012 28 PLP
9620 F013 20A100 JSR $00A1 CALL SUB
9630 F016 48 PHA
9640 F017 ADBFF3 LDA GETBUS GET BUS?
9650 F01A F00B BEQ PARSE3 -NO, EXIT
9660 F01C A900 LDA #0 CLEAR GET BUS
9670 F01E 8DBFF3 STA GETBUS AND ARBITC
9680 F021 8D4AF3 STA ABCSAT LOCKOUT STATUS
9690 F024 200FF8 JSR ARBITC RELEASE BUS
9700 F027 68 PARSE3 PLA EXIT
9710 F028 4C8C0C JMP $0C8C
9720 ;
9730 ;*****

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9740      ;* EXTENDED POKE   *
9750      ;* $1693 JMP POKEC *
9760      ;*****
9770      ;
9780 F02B C923    POKEC   CMP #'#
9790 F02D D009    BNE POKEC1
9800 F02F 8DBFF3  STA GETBUS
9810 F032 200CF8  JSR ARBITS
9820 F035 20C000  JSR CHRGET
9830 F038 206616  POKEC1 JSR $1666
9840 F03B 209616  JSR $1696
9850 F03E ADBFF3  LDA GETBUS
9860 F041 F008    BEQ POKEC2
9870 F043 200FF8  JSR ARBITC
9880 F046 A900    LDA #0
9890 F048 8DBFF3  STA GETBUS
9900 F04B 60      POKEC2 RTS
9910      ;
9920      ;*****
9930      ;* REST OF WAIT *
9940      ;*****
9950      ;
9960 F04C ADBFF3  WAIT8   LDA GETBUS
9970 F04F F003    BEQ WAIT7
9980 F051 200CF8  JSR ARBITS
9990 F054 B119    WAIT7  LDA ($19),Y
10000 F056 200FF8 JSR ARBITC
10010 F059 4597    EOR $97
10020 F05B 2596    AND $96
10030 F05D D003    BNE WAIT9
10040 F05F 4C85EC  JMP WAIT6
10050 F062 60      WAIT9  RTS
10060      ;
10070      ;*****
10080      ;* SEMA TIMER TICK *
10090      ;*****
10100      ;
10110 F063 08      CNTDN5 PHP
10120 F064 2C02F7  BIT $F702
10130 F067 28      PLP
10140 F068 1005    BPL CNTDN6
10150 F06A A9FF    LDA #$FF
10160 F06C 8D7CF3  STA TICK
10170 F06F 60      CNTDN6 RTS
10180 F070 EA      NOP
10190 F071 EA      NOP
10200      ;
10210      ;*****
10220      ;* ON BUS PRINTER DRIVER *
10230      ;*****
10240      ;
10250 F072 200CF8  PRNTA1 JSR ARBITS
10260 F075 18      CLC
10270 F076 207FF0  JSR PRNTX9
10280 F079 200FF8  JSR ARBITC
10290 F07C 4CBOEE  JMP PRNT6
10300      ;
10310 F07F 6CA7F3  PRNTX9 JMP (PRNTJP)
10320      ;

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10330	F082	200CF8	PRINTD	JSR ARBITS	GET BUS
10340	F085	CCBEF3		CPY PRNTYP	GET PRINTER MODE
10350	F088	08		PHP	
10360	F089	9002		BCC PRNTQ1	
10370	F08B	A200		LDX #0	
10380	F08D	209FF0	PRNTQ1	JSR PRNT1	GET XMIT CNTR REG
10390	F090	28		PLP	PARALLEL MODE?
10400	F091	9010		BCC PRNTS1	-NO, GOTO SERIAL DRIVER
10410	F093	4A		LSR A	XMIT?
10420	F094	B026		BCS PRNTX2	-NO
10430	F096	20B5F0		JSR PRNT4	XMIT DATA
10440	F099	2C20F4	PRNTP1	BIT \$F420	STROBE DATA XFER
10450	F09C	4CAFF0		JMP PRNTS2	
10460			;		
10470	F09F	BDOOCF	PRNT1	LDA \$CF00,X	GET XMIT CNTR REG
10480	FOA2	60		RTS	
10490			;		
10500	FOA3	4A	PRNTS1	LSR A	XMIT?
10510	FOA4	9003		BCC PRNS14	
10520	FOA6	2000F6		JSR PRNTQ2	
10530	FOA9	4A	PRNS14	LSR A	
10540	FOAA	9010		BCC PRNTX2	-NO
10550	FOAC	20B5F0		JSR PRNT4	XMIT DATA
10560	FOAF	200FF8	PRNTS2	JSR ARBITC	RELEASE BUS
10570	FOB2	4C91EE		JMP PRNT7	AND CONT
10580			;		
10590	FOB5	ADB638	PRNT4	LDA PRNDAT	XMIT DATA
10600	FOB8	9D01CF	PRNT2	STA \$CF01,X	
10610	FOBB	60		RTS	
10620			;		
10630	FOBC	200FF8	PRNTX2	JSR ARBITC	RELEASE BUS
10640	FOBF	4CBDEE		JMP PRINTR	
10650			;		
10660			*****		
10670			;* BASIC TAPS *		
10680			;* \$07E0 JSR BASTP1 *		
10690			;* \$07B4 JMP BASTP2 *		
10700			*****		
10710			;		
10720	FOC2	58	BASTP1	CLI	ENABLE INTERRUPTS
10730	FOC3	4CAE21		JMP \$21AE	
10740			;		
10750	FOC6	58	BASTP2	CLI	ENABLE INTERRUPTS
10760	FOC7	BA		TSX	SAVE STK PNT
10770	FOC8	8E7EF3		STX STKTMP	
10780	FOCB	AE64F3		LDX BUSONL	RELEASE BUS?
10790	FOCE	F003		BEQ BASTP3	-NO
10800	FODO	200FF8		JSR ARBITC	RELEASE BUS
10810	FOD3	4CBD43	BASTP3	JMP \$43BD	EXIT
10820			;		
10830			*****		
10840			;* FLOPPY DRIVER PATCHES *		
10850			;* \$4107 JSR FLOPEX *		
10860			;* \$4232 JSR FLOPEX *		
10870			;* \$2E1D JSR FSUPH *		
10880			;* \$33F7 JMP RWEXIT *		
10890			;* \$240E JSR FLOPEX *		
10900			;* \$4156 JMP XFFBUF *		
10910			;		

10920		;	* \$2E77 .BYTE 6	*
10930		;	;	*
10940		;	* \$2E20 NOP	*
10950		;	;	*
10960		;	* \$401A NOP FORCE FB	*
10970		;	CLC	*
10980		;	;	*
10990		;	*****	*****
11000		;	;	;
11010 F0D6 200CF8	FLOPEX	JSR ARBITS	GET BUS	
11020 F0D9 20D4F3		JSR FHUNLD	UNLOAD HEAD	
11030 F0DC A200	DKLOKF	LDX #0	RELEASE DK SEMA	
11040 F0DE F003		BEQ FLPEX1		
11050 F0EO 2009F8		JSR UNLOCK		
11060 F0E3 A900	FLPEX1	LDA #0	MARK DK SEMA CLEAR	
11070 F0E5 8DDDF0		STA DKLOKF+1	RELEASE BUS AND EXIT	
11080 F0E8 4COFF8		JMP ARBITC		
11090	;			
11100 FOEB 8D0BF1	FSUPH	STA FSUPH1+1	SAVE REG	
11110 FOEE 8E0DF1		STX FSUPH2+1		
11120 F0F1 9002		BCC FSUPH3	CONT ON NO ERR	
11130 F0F3 68		PLA	UNLOAD RET ADD ON ERR	
11140 F0F4 68		PLA		
11150 F0F5 08	FSUPH3	PHP	LOCK DK SEMA	
11160 F0F6 A2F7		LDX #247		
11170 F0F8 8E7DF3		STX TIMER		
11180 F0FB 8EDDF0		STX DKLOKF+1		
11190 F0FE 2006F8		JSR LOCK		
11200 F101 200CF8		JSR ARBITS	GET BUS	
11210 F104 28		PLP		
11220 F105 AE7FF3		LDX DKUNIT	SETUP DISK UNIT#	
11230 F108 8613		STX \$13		
11240 F10A A900	FSUPH1	LDA #0	RESTORE REG	
11250 F10C A200	FSUPH2	LDX #0		
11260 F10E B002		BCS FSUPH4	EXIT ON ERR	
11270 F110 E413		CPX \$13	AND EXIT	
11280 F112 60	FSUPH4	RTS		
11290	;			
11300 F113 C90E	XFFBUF	CMP #\$0E	XFER DIRECT TO DK FROM BUF?	
11310 F115 900D		BCC XFBUF1	-NO	
11320 F117 A537		LDA \$37		
11330 F119 D009		BNE XFBUF1	-NO	
11340 F11B A538		LDA \$38		
11350 F11D C94E		CMP #\$4E		
11360 F11F D003		BNE XFBUF1	-NO	
11370 F121 4C5A41		JMP \$415A	-YES	
11380 F124 4C7F41	XFBUF1	JMP \$417F	EXIT	
11390	;			
11400 F127 08	RWEXIT	PHP	SAVE REG	
11410 F128 48		PHA		
11420 F129 8E32F1		STX RWEXT5+1		
11430 F12C A513		LDA \$13	SETUP DK UNIT	
11440 F12E 2038F1		JSR RWEXT6	XFER DK PARAM	
11450 F131 A200	RWEXT5	LDX #0	RESTORE REG	
11460 F133 68		PLA		
11470 F134 28		PLP		
11480 F135 4CD22D		JMP \$2DD2	EXIT	
11490	;			
11500 F138 8D7FF3	RWEXT6	STA DKUNIT		

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11510 F13B A95C      LDA #RWEXT2      XFER DK UNIT
11520 F13D A2F1      LDX #RWEXT2/256
11530 F13F 2053F1    JSR RWEXT1
11540 F142 A962      LDA #RWEXT3      XFER DK PARAM.
11550 F144 A2F1      LDX #RWEXT3/256
11560 F146 2053F1    JSR RWEXT1
11570 F149 A968      LDA #RWEXT4
11580 F14B A2F1      LDX #RWEXT4/256
11590 F14D 2053F1    JSR RWEXT1
11600 F150 4COFF8    JMP ARBITC     RELEASE BUS
11610 ;
11620 F153 8D60F3    RWEXT1 STA PARMPS+1   XMIT DATA
11630 F156 8E61F3    STX PARMPS+2
11640 F159 4C15F8    JMP INTXMT
11650 ;
11660 F15C 7FF3      RWEXT2 .WORD DKUNIT  DK UNIT XMIT PARAM.
11670 F15E 7FF3      .WORD DKUNIT  CNT BLK
11680 F160 80         .BYTE $80
11690 F161 01         .BYTE 1
11700 ;
11710 F162 002E      RWEXT3 .WORD $2E00    DK PARAM. XMIT
11720 F164 002E      .WORD $2E00  CNT BLK
11730 F166 80         .BYTE $80
11740 F167 18         .BYTE 24
11750 ;
11760 F168 532E      RWEXT4 .WORD $2E53    DK PARAM. XMIT
11770 F16A 532E      .WORD $2E53  CNT BLK
11780 F16C 80         .BYTE $80
11790 F16D 04         .BYTE 4
11800 ;
11810 ;*****  

11820 ;* MARK SYSBUF DIRTY *
11830 ;* $43FD JMP MSYSTT *
11840 ;*
11850 ;* $4514 NOP *
11860 ;* NOP *
11870 ;* JSR MSYSDT *
11880 ;*
11890 ;* $02E6 ORA #$44 *
11900 ;* NOP *
11910 ;* NOP *
11920 ;* NOP *
11930 ;* NOP *
11940 ;*****  

11950 ;
11960 F16E ADA126    MSYSTT LDA $26A1    SETUP DISK TYPE
11970 F171 OA          ASL A
11980 F172 4CDA02    JMP $02DA
11990 ;
12000 F175 48          MSYSDT PHA        MARK SYSBUF DIRTY
12010 F176 A5A9          LDA $A9
12020 F178 0980          ORA #$80
12030 F17A 8DFE4D        STA $4DFE
12040 F17D 4CE102        JMP $02E1
12050 ;
12060 ;*****  

12070 ;* HARD DISK READ WRITE INTERFACE *
12080 ;* ($469F JMP HDMPT) *
12090 ;* ($4681 JSR HDMGT) *

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12100 ;* (\$35B3 JMP HREAD) *
 12110 ;* (\$36C2 JMP HWRITE) *
 12120 ;*****
 12130 ;
 12140 F180 AFEF4D HDMPT LDX \$4DFE IS SYSBUFF
 12150 F183 E088 CPX #\$88 DIRTY ?
 12160 F185 9003 BCC HDMPT1 -NO-
 12170 F187 4CC646 JMP \$46C6 -YES- DUMP
 12180 ;
 12190 F18A A900 HDMPT1 LDA #0
 12200 F18C 60 RTS
 12210 ;
 12220 F18D 2904 HDMPT3 AND #4 IS SYSBUFF HARD ?
 12230 F18F FOEF BEQ HDMPT -NO- DUMP BUFF
 12240 F191 AD85F3 LDA DBASE+5 SAME BASE ADD?
 12250 F194 CD0234 CMP \$3402
 12260 F197 D010 BNE HDMPT5 -NO-
 12270 F199 AD86F3 LDA DBASE+6
 12280 F19C CD0334 CMP \$3403
 12290 F19F D008 BNE HDMPT5 -NO-
 12300 F1A1 A5A2 LDA \$A2 -YES- GO TEST FOR
 12310 F1A3 4D82F3 EOR DBASE+2 SAME SECTOR
 12320 F1A6 4CA446 JMP \$46A4
 12330 F1A9 4CBD46 HDMPT5 JMP \$46BD GOTO GET SECTOR
 12340 ;
 12350 F1AC D8 HDMGT CLD IS SYSBUFF
 12360 F1AD ADFE4D LDA \$4DFE CLEAR ?
 12370 F1B0 D0DB BNE HDMPT3 -NO- DUMP SYSBUFF
 12380 F1B2 18 CLC -YES-
 12390 F1B3 90D5 BCC HDMPT1 READ SECTOR
 12400 ;
 12410 F1B5 200CF8 HREAD JSR ARBITS GET BUS
 12420 F1B8 D8 CLD
 12430 F1B9 868A STX \$8A
 12440 F1BB 20B635 JSR \$35B6 READ SECTOR
 12450 F1BE 08 HREAD1 PHP SAVE STATUS & A REG
 12460 F1BF 48 PHA
 12470 F1C0 AD0234 LDA \$3402 SAVE BASE CYCL.
 12480 F1C3 8D85F3 STA DBASE+5
 12490 F1C6 AD0334 LDA \$3403
 12500 F1C9 8D86F3 STA DBASE+6
 12510 F1CC 68 PLA RESTORE A REG & STATUS
 12520 F1CD 28 PLP
 12530 F1CE 60 RTS EXIT
 12540 ;
 12550 F1CF 20E445 HREAD2 JSR \$45E4 READ DISK
 12560 F1D2 200FF8 JSR ARBITC RELEASE BUS AND EXIT
 12570 F1D5 4C8D46 JMP \$468D
 12580 ;
 12590 F1D8 200CF8 HWRITE JSR ARBITS GET BUS
 12600 F1DB D8 CLD
 12610 F1DC 868A STX \$8A
 12620 F1DE 4C2FF2 JMP SBXFP WRITE SECTOR
 12630 F1E1 4CBEF1 JMP HREAD1 EXIT ***
 12640 ;
 12650 ;*****
 12660 ;* HARD DISK PATCH FOR SYSBUFF *
 12670 ;* (\$3645 JMP SBXFG) *
 12680 ;* (\$4C38 JMP SBDUMP) *

12690 ;*****

 12700 ;

 12710 F1E4 00 SBXFST .BYTE 0

 12720 ;

 12730 F1E5 E018 SBXFTB .DBYTE \$E018,\$4E00,\$E018

 12730 F1E7 4E00

 12730 F1E9 E018

 12740 ;

 12750 F1EB A002 SBXF LDY #2 SETUP BUFF

 12760 F1ED BDE5F1 LDA SBXFTB,X XFER COORDINATES

 12770 F1F0 99FFF1 STA SBXF1,Y

 12780 F1F3 BDE7F1 LDA SBXFTB+2,X

 12790 F1F6 9902F2 STA SBXF2,Y

 12800 F1F9 E8 INX

 12810 F1FA 88 DEY

 12820 F1FB DOFO BNE SBXF+2

 12830 F1FD A20E LDX #\$0E

 12840 F1FF B918E0 SBXF1 LDA \$E018,Y

 12850 F202 99004E SBXF2 STA \$4E00,Y

 12860 F205 C8 INY

 12870 F206 D0F7 BNE SBXF1

 12880 F208 EE01F2 INC SBXF1+2

 12890 F20B EE04F2 INC SBXF2+2

 12900 F20E CA DEX

 12910 F20F DOEE BNE SBXF1

 12920 F211 60 RTS

 12930 ;

 12940 F212 CC19EE SBXFG CPY \$EE19

 12950 F215 D013 BNE SBXFG1 EXIT ON DISK ERR

 12960 F217 48 PHA

 12970 F218 A200 LDX #0 MOVE DATA FROM

 12980 F21A 20EBF1 JSR SBXF HD BUFF TO SYSBUFF

 12990 F21D A68A LDX \$8A GET UNIT NO.

 13000 F21F B500 LDA 0,X

 13010 F221 2903 AND #3 SET SYSBUFF STATUS

 13020 F223 0984 ORA #\$84

 13030 F225 8DFE4D STA \$4DFE

 13040 F228 68 PLA EXIT

 13050 F229 60 RTS

 13060 F22A A90A SBXFG1 LDA #10 SETUP AND GOTO

 13070 F22C 4C4C36 JMP \$364C DISK ERR

 13080 ;

 13090 F22F ADDE4D SBXFP LDA \$4DFE IS SYSBUF HD?

 13100 F232 2904 AND #4 -NO- DUMP TO FLOP

 13110 F234 F00B BEQ SBXFP1 -YES- MOVE

 13120 F236 A202 LDX #2 SYSBUFF TO HD BUFF

 13130 F238 20EBF1 JSR SBXF AND SAVE

 13140 F23B D8 CLD

 13150 F23C A68A LDX \$8A

 13160 F23E 4CC536 JMP \$36C5

 13170 F241 200224 SBXFP1 JSR \$2402 DUMP SYSBUFF

 13180 F244 A900 LDA #0 AND SET CLEAR

 13190 F246 A8 TAY

 13200 F247 8DFE4D STA \$4DFE

 13210 F24A 60 RTS

 13220 ;

 13230 F24B 48 SBDUMP PHA IS SYSBUFF HD?

 13240 F24C 2904 AND #4 -NO- GOTO FD DUMP

 13250 F24E F002 BEQ SBDMP1

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13260 F250 68 PLA
13270 F251 60 RTS
13280 F252 68 SBDMP1 PLA
13290 F253 4C0A24 JMP $240A EXIT
13300 ; ****
13310 ; * DOS GET/PUT INTERFACE *
13320 ; * ($4516 JSR HBUFDT) *
13330 ; * ($4522 JSR HPEXIT) *
13340 ; * ($37AE JSR DMPSET) *
13350 ; ****
13360 ;
13370 ;
13380 F256 A5A9 HBUFDT LDA $A9 GET DEV #
13390 F258 09C4 ORA #$C4 SET SYSBUFF
13400 F25A 8DFE4D STA $4DFE DIRTY
13410 F25D 60 RTS
13420 ;
13430 F25E 209F46 HEXIT JSR $469F MAKE SURE BUFF IS DUMPED TO DISK
13440 F261 4CDF44 JMP $44DF
13450 ;
13460 F264 48 DMPSET PHA SETUP HD DUMP
13470 F265 ADFE4D LDA $4DFE
13480 F268 0904 ORA #4
13490 F26A 8DFE4D STA $4DFE
13500 F26D 68 PLA
13510 F26E 4C602D JMP $2D60 GO DUMP TO DISK
13520 ;
13530 ;
13540 ;
13550 ;
13560 ;
13570 ;
13580 F271 A9FF INZBRI LDA #$FF INHIBIT BUSS
13590 F273 8D4AF3 STA ABCSAT RELEASE
13600 F276 A960 LDA #$60 DISABLE
13610 F278 8DEBF1 STA SBXF SYSBUFF
13620 F27B 200CF8 JSR ARBITS GET BUSS
13630 F27E AD6826 LDA $2668 AND GO
13640 F281 60 RTS INIZ DISK
13650 ;
13660 ;
13670 ;
13680 ;
13690 ;
13700 ;
13710 F282 A0A0 INZBRR LDY #$AO ENABLE
13720 F284 8CEBF1 STY SBXF SYSBUFF
13730 F287 A000 LDY #0 RELEASE
13740 F289 8C4AF3 STY ABCSAT BUSS
13750 F28C 200FF8 JSR ARBITC
13760 F28F 4CDF24 JMP $24DF
13770 ;
13780 ;
13790 ;
13800 ;
13810 ;
13820 ;
13830 F292 D003 TIMEBG BNE TMBUG1
13840 F294 200224 JSR $2402

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13850 F297 60      TMBUG1 RTS
13860
13870
13880
13890
13900
13910
13920
13930 F298 A581   FREPCH LDA $81      FINISH FRE CALC
13940 F29A E57F    SBC $7F
13950 F29C A200    LDX #0       SETUP FP
13960 F29E 860E    STX $0E
13970 F2A0 85AF    STA $AF
13980 F2A2 84B0    STY $B0
13990 F2A4 8A      TXA
14000 F2A5 A291    LDX #$91
14010 F2A7 85B1    STA $B1
14020 F2A9 85B2    STA $B2
14030 F2AB 46AF    LSR $AF
14040 F2AD 66B0    ROR $B0
14050 F2AF 66B1    ROR $B1
14060 F2B1 38      SEC
14070 F2B2 4C4A1B  JMP $1B4A
14080
14090
14100 F600        * = $F600
14110
14120
14130
14140
14150
14160 F600 48      PRNTQ2 PHA      TEST FOR XOFF
14170 F601 8C4AF6  STY PRNTQ3+1
14180 F604 A000    LDY #0
14190 F606 A9DD    LDA #$DD
14200 F608 8DB8F0  STA PRNT2
14210 F60B B9CAF3  PRNTQ4 LDA XOFF,Y
14220 F60E F039    BEQ PRNTQ3
14230 F610 20B8F0  JSR PRNT2
14240 F613 D034    BNE PRNTQ3
14250 F615 C8      INY
14260 F616 B9CAF3  LDA XOFF,Y
14270 F619 F009    BEQ PRNTQ7
14280 F61B A964    LDA #100
14290 F61D 2052F6  JSR PRNTQ8
14300 F620 F027    BEQ PRNTQ3
14310 F622 B0E7    BCS PRNTQ4
14320 F624 A000    PRNTQ7 LDY #0      WAIT FOR XON
14330 F626 A901    PRNTQ6 LDA #1
14340 F628 2052F6  JSR PRNTQ8
14350 F62B D00C    BNE PRNTQ5
14360 F62D 200FF8  JSR ARBITC
14370 F630 20C4EE  JSR PRNTR1
14380 F633 200CF8  JSR ARBITS
14390 F636 4C26F6  JMP PRNTQ6
14400
14410 F639 B9C0F3  PRNTQ5 LDA XON,Y  TEST FOR XON
14420 F63C F00B    BEQ PRNTQ3
14430 F63E 20B8F0  JSR PRNT2

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14440	F641	DOE1		BNE PRNTQ7	AJR
14450	F643	C8		INY	DATA IN ATC
14460	F644	B9C0F3		LDA XON,Y	DATA
14470	F647	DODD		BNE PRNTQ6	DATA ATC
14480	F649	A000	PRNTQ3	LDY #0	EXIT
14490	F64B	A99D		LDA #\$9D	
14500	F64D	8DB8F0		STA PRNT2	
14510	F650	68		PLA	
14520	F651	60		RTS	
14530			;		
14540	F652	8D8AF3	PRNTQ8	STA DLYTMR	INPUT DATA
14550	F655	209FF0	PRNTQ9	JSR PRNT1	
14560	F658	4A		LSR A	
14570	F659	CE8AF3		DEC DLYTMR	
14580	F65C	F002		BEQ PRNTV9	
14590	F65E	90F5		BCC PRNTQ9	
14600	F660	60		PRNTV9 RTS	
14610			;		
14620			;	*****	
14630			;	* SERIAL DRIVER INPUT FINISH *	
14640			;	*****	
14650			;		
14660	F661	200CF8	INPTZ1	JSR ARBITS	GET BUS
14670	F664	A900	INPTX2	LDA #0	
14680	F666	C904		CMP #4	EXTERNAL DRIVER?
14690	F668	B02A		BCS INPTZ5	-YES
14700	F66A	A9C8		LDA #200	SETUP INPUT TIME LIMIT
14710	F66C	8D79F3		STA PRETCT	
14720	F66F	A9FF	INPTZ4	LDA #\$FF	
14730	F671	2052F6		JSR PRNTQ8	GET ACIA STATUS
14740	F674	B009		BCS INPTZ2	CONT IF CHAR RECEIVED
14750	F676	CE79F3		DEC PRETCT	DEC TIMER
14760	F679	D0F4		BNE INPTZ4	AND RETRY
14770	F67B	A90D		LDA #\$0D	EXIT WITH END OF DATA
14780	F67D	D008		BNE INPTZ3	
14790			;		
14800	F67F	A9BD	INPTZ2	LDA #\$BD	GET CHAR
14810	F681	8DB8F0		STA PRNT2	
14820	F684	20B8F0		JSR PRNT2	
14830	F687	8DB638	INPTZ3	STA PRNDAT	
14840	F68A	48		PHA	
14850	F68B	A99D		LDA #\$9D	
14860	F68D	8DB8F0		STA PRNT2	
14870	F690	68		PLA	
14880	F691	4COFF8		JMP ARBITC	RELEASE BUS
14890			;		
14900	F694	200CF8	INPTZ5	JSR ARBITS	INPUT FROM EXTERNAL DRIVER
14910	F697	207FF0		JSR PRNTX9	
14920	F69A	4COFF8		JMP ARBITC	
14930			;		
14940			;	*****	
14950			;	* SWAPER INTERRUPT *	
14960			;	* \$490A JMP SWPFX *	
14970			;	* NOP *	
14980			;	* \$4952 JMP SWPFX1 *	
14990			;	*****	
15000			;		
15010	F69D	08	SWPFX	PHP	SAVE STATUS
15020	F69E	78		SEI	PREVENT INTERRUPTS

15030 F69F 68 PLA
15040 F6A0 8DABF6 STA SWPFX1+1
15050 F6A3 68 PLA RETURN TO SWAP
15060 F6A4 8D0349 STA \$4903
15070 F6A7 4COE49 JMP \$490E
15080 ;
15090 F6AA A900 SWPFX1 LDA #0 RESTORE STATUS
15100 F6AC 48 PHA
15110 F6AD 28 PLP
15120 F6AE AD0549 LDA \$4905 AND EXIT
15130 F6B1 4C5549 JMP \$4955
15140 ;
15150 ;*****
15160 ;* LOAD FILE SIZE MOD *
15170 ;* \$407C JMP LSDK1 *
15180 ;*****
15190 ;
15200 F6B4 C98A LSDK1 CMP #\$8A
15210 F6B6 900F LSDK2 BCC LSDK3
15220 F6B8 E07F CPX #\$7F
15230 F6BA 900B BCC LSDK3
15240 F6BC ADB9F6 LDA LSDK2+1
15250 F6BF 6903 ADC #3
15260 F6C1 AA TAX
15270 F6C2 ADB5F6 LDA LSDK1+1
15280 F6C5 6900 ADC #0
15290 F6C7 60 LSDK3 RTS
15300 ;