

SD/DD

Listing

```
1000 *=$04B0
1010 PUTLIN=$F385
1020 DSKINV=$E453
1030 SIOV=$E459
1040 DOSVEC=$0A
1050 DOSINI=$0C
1060 COLDST=$0244
1070 GETCH=$F593
1080 OUTCH=$F5B7
1090 CHAR=$02FA
1100 ATACHR=$02FB
1110 INBUF=$B9 :TEMP WORK AREA
1120 KGETC2=$F6DD
1130 SDRIVE=$CD :SOURCE DRIVE
1140 DDRIVE=$CC :DEST DRIVE
1150 NUMBER=$CE :NUMBER OF COPIES
1160 FFLAG=$B0 :FORMAT FLAG
1170 SECTLO=$B1
1180 SECTHI=$B2
1190 TNUM=$B3
1200 TEMP1=$B4
1210 TEMP2=$B5
1220 NEWTOP=$B6
1230 BUSCMD=$B7
1240 DENFLG=$B8
1250 TBUFLO=$00
1260 TBUFHI=$07
1270 DDEVIC=$0300 :BUS I.D. #
1280 DUNIT=$0301 :DEVICE #
1290 DCOMND=$0302 :BUS COMMAND
1300 DSTATS=$0303 :STATUS
1310 DBUFLO=$0304 :BUFFER POINTER LO
1320 DBUFHI=$0305 :BUFFER POINTER HI
1330 DTIMLO=$0306 :DISK TIME OUT
1340 DBYTLO=$0308 :# OF BYTES LO
1350 DBYTHI=$0309 :# OF BYTES HI
1360 DAUX1=$030A :SECTOR # LO
1370 DAUX2=$030B :SECTOR # HI
1380 RAMTOP=$6A
1390 :SET UP TITLE
1400 START JSR INIT :INIT&PROTECTION
1410 NCOPY SEC
1420 LDA RAMTOP
1430 SBC #5
1440 STA NEWTOP :TOP FOR BUFFER
1450 LDA #1
1460 STA SECTLO :POINT TO FIRST
1470 LDX #MESS2&255
1480 LDY #MESS2/256
1490 JSR PUTLIN :NUM OF COPIES?
1500 LDX #0
1510 STX SECTHI
1520 STX $CF
1530 STX DENFLG
1540 KGET JSR KGETC2 :GET CHARACTER
1550 LDX $CF
1560 LDA ATACHR
1570 CMP #$44 : "D" FOR DOUBLE DENSITY
1580 BNE CKDIG
1590 STA DENFLG :SHOW DD
1595 JSR OUTCH :PRINT "D"
1600 JMP KGET
1610 CKDIG CMP #$30 :LESS THAN 0?
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1630 CMP ##3A :MORE THAN 9
1640 BCC NEXTCH
1650 CMP ##9B :RETURN?
1660 BNE KGET
1670 NEXTCH STA INBUF,X
1680 JSR OUTCH
1690 INC %CF
1700 CMP ##9B :RETURN?
1710 BNE KGET
1720 LDA %CF
1730 CMP #4
1740 BCS NCOPY
1750 CMP #2
1760 BNE TWODIG
1770 LDA INBUF
1780 SEC
1790 SBC ##30
1800 JMP STNUM
1810 TWODIG LDA INBUF :ASCII TO HEX
1820 SEC
1830 SBC ##30
1840 ASL A
1850 STA NUMBER
1860 ASL A
1870 ASL A
1880 CLC
1890 ADC NUMBER
1900 STA NUMBER
1910 LDA INBUF+1
1920 SEC
1930 SBC ##30
1940 CLC
1950 ADC NUMBER
1960 STNUM STA NUMBER
1970 STA TNUM
1980 SRCDRV LDX #MESS3&255
1990 LDY #MESS3/256
2000 JSR PUTLIN :SOURCE DRIVE?
2010 K2 JSR KGETC2
2020 LDA ATACHR
2030 CMP ##31 :LESS THAN 1?
2040 BCC K2
2050 CMP ##35 :MORE THAN 4?
2060 BCS K2
2070 SEC
2080 SBC ##30
2090 STA SDRIVE
2100 JSR MYOUT
2110 DESDRV LDX #MESS4&255
2120 LDY #MESS4/256
2130 JSR PUTLIN :DESTIN DRIVE?
2140 K3 JSR KGETC2
2150 LDA ATACHR
2160 CMP ##31 :LESS THAN 1?
2170 BCC K3
2180 CMP ##35 :MORE THAN 4?
2190 BCS K3
2200 SEC
2210 SBC ##30
2220 STA DDRIVE
2230 JSR MYOUT
2240 FORMAT LDX #MESS5&255
2250 LDY #MESS5/256
2260 JSR PUTLIN :FORMAT DISK?
2270 JSR KGETC2

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2290 MAIN SRCMSG ;GO WAIT FOR START
2300 RSRC LDA ##40
2310 STA BUSCMD
2320 JSR READ
2330 JMP DSTMSG
2340 WLOOP JSR FMTDSK
2350 WRT LDA ##80
2360 STA BUSCMD
2370 JSR WRITE
2380 DEC TNUM ;NUMBER OF COPIES
2390 LDA TNUM ;IN PASS
2400 CMP #0
2410 BNE DSTMSG
2420 STA FFLAG ;TURN OFF FORMAT FLAG
2430 LDA NUMBER ;GET READY FOR NEXT
2440 STA TNUM ;PASS
2450 JSR TDONE ;SEE IF FINISHED
2460 SRCMSG JSR MSG6
2470 JSR BEGIN
2480 JMP RSRC ;GO READ MORE SECTORS
2490 DSTMSG JSR MSG8
2500 JSR BEGIN
2510 JMP WLOOP ;GO WRITE NEXT DISK
2520 BEGIN LDA $D01F
2530 CMP #6 ;IS START PUSHED
2540 BNE BEGIN ;NO. GOTO BEGIN
2550 RTS
2560 FMTDSK LDA FFLAG ;FORMAT FLAG
2570 CMP ##59 ;"Y"
2580 BNE CONT ;NO.GOTO CONT
2590 STA DTIMLO
2600 LDA DDRIVE
2610 STA DUNIT
2620 LDA ##21 ;FORMAT
2630 STA DCOMND
2640 JSR GETRDY
2650 LDA ##40
2660 STA DSTATS
2670 STA DBUFLO
2680 SEC
2690 LDA RAMTOP
2700 SBC #3
2710 STA DBUFHI
2720 JSR SIOV ;GO FORMAT DISK
2730 BMI FMTDSK ;TRY AGAIN IF BAD
2740 CONT RTS
2750 READ LDA SDRIVE ;SOURCE DRIVE
2760 STA DUNIT
2770 LDA ##52 ;READ COMMAND
2780 STA DCOMND
2790 LDA SECTLO ;STORE IN TEMP SO WE
2800 STA TEMP1 ;KNOW WHERE TO WRITE
2810 STA DAUX1 ;AND GET READY
2820 LDA SECTHI ;FOR I/O CALL
2830 STA TEMP2
2840 STA DAUX2 ;SECTOR TO READ
2850 JSR GETRDY
2860 LDA #TBUFLO
2870 STA DBUFLO
2880 LDA #TBUFHI
2890 STA DBUFHI ;BUFFER POINTERS
2900 CONT2 JSR SIOV
2910 JSR INCSD
2920 BCC CONT2
2930 RTS

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2950 LDA SECTLO ;AND BUFFER PIONTERS
2960 ADC #1
2970 STA SECTLO
2980 STA DAUX1
2990 LDA SECTHI
3000 ADC #0
3010 STA SECTHI
3020 STA DAUX2
3030 CMP ##02
3040 BNE CONT1
3050 LDA SECTLO
3060 CMP ##D1
3070 BNE CONT1
3080 SEC ;SET CARRY WHEN DONE
3090 RTS
3100 CONT1 JSR GETRDY
3110 RTS
3120 WRITE LDA DDRIVE ;GET READY
3130 STA DUNIT ;TO WRITE
3140 LDA ##50 ;WRITE COMMAND
3150 STA DCOMND
3160 LDA #10
3170 STA $4D ;ATTRACT FLAG
3180 STA DTIMLO
3190 LDA TEMP1
3200 STA SECTLO
3210 STA DAUX1
3220 LDA TEMP2
3230 STA SECTHI
3240 STA DAUX2
3250 JSR GETRDY
3260 LDA #TBUFLO
3270 STA DBUFLO
3280 LDA #TBUFHI
3290 STA DBUFHI
3300 CONT3 JSR SIOV
3310 JSR INCSD
3320 BCC CONT3
3330 RTS
3340 GETRDY LDA ##31
3350 STA DDEVIC
3360 LDA BUSCMD
3370 STA DSTATS
3380 LDA DENFLG
3390 BEQ SINGLE
3400 LDA DCOMND
3410 CMP ##21
3420 BEQ B256
3430 LDA SECTLO
3440 CMP #4
3450 BCS B256
3460 LDA SECTHI
3470 BNE B256
3480 SINGLE LDA #0
3490 STA DBYTHI
3500 LDA ##80
3510 STA DBYTLO
3520 CLC
3530 LDA DBUFLO
3540 ADC ##80
3550 STA DBUFLO
3560 LDA DBUFHI
3570 ADC #0
3580 STA DBUFHI
3590 CMP NEWTOP

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3610 B256 LDA #0
3620 STA DBYTLO
3630 LDA #1
3640 STA DBYTHI
3650 CLC
3660 LDA DBUFHI
3670 ADC #1
3680 STA DBUFHI
3690 CMP NEWTOP
3700 RTS
3710 MESS2 .BYTE "COPIES?",#9B
3720 MESS3 .BYTE "SOURCE?",#9B
3730 MESS4 .BYTE "#DESTIN?",#9B
3740 MESS5 .BYTE "#FORMAT?",#9B
3750 MESS6 .BYTE "#INSERT UNIT# PUSH START",#9B
3760 MESS8 .BYTE "#INSERT #HUB#",#9B
3770 MSG6 LDX #MESS6&255
3780 LDY #MESS6/256
3790 JMP PUTLIN ;SOURCE DISK
3800 MSG8 LDX #MESS8&255
3810 LDY #MESS8/256
3820 JMP PUTLIN ;NEXT DISK
3830 TDONE LDA SECTLO
3840 CMP #D1
3850 BNE TRTS
3860 LDA SECTHI
3870 CMP #2
3880 BNE TRTS
3890 JMP $E474 ;WARMST
3900 TRTS RTS
3910 MYOUT LDA ATACHR
3920 STA FFLAG
3930 JMP DUTCH
3940 INIT LDA #5
3950 STA INBUF
3960 LDA #0
3970 STA DBUFLO
3980 STA DAUX2
3990 LDA #1
4000 STA DUNIT
4010 LDA #52
4020 STA DCOMND
4030 LDA #8
4040 STA DAUX1
4050 STA DBUFHI
4060 NTRY LDA #0
4070 STA 20
4080 JSR DSKINV
4090 JSR DSKINV
4100 LDA 20
4110 CLC
4120 CMP #11
4130 BCC INIT2
4140 DEC INBUF
4150 BNE NTRY
4160 LDX #MESS1&255
4170 LDY #MESS1/256
4180 JSR PUTLIN ;PUT COPYRIGHT UP
4190 LDA #1 ;DRIVE NUMBER
4200 STA DUNIT
4210 LDA #21 ;FORMAT COMMAND
4220 STA DCOMND
4230 JSR $E453
4240 FOREV JMP FOREV
4250 INIT2 LDA DOSINI

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4270 ADC #3
4280 STA DOSVEC
4290 LDA DOSINI+1
4300 STA DOSVEC+1
4310 LDA #0
4320 STA COLDST
4330 LDA #10
4340 STA DTIMLO
4350 LDX #MESS1&255
4360 LDY #MESS1/256
4370 JSR PUTLIN ;PUT COPYRIGHT UP
4380 RTS
4390 MESS1 .BYTE " }COPYRIGHT (C) 1983 NEWELL INDUSTRIES DO NOT USE"
4400 .BYTE " THIS PROGRAM ILLEGALLY".#9B
4410 .END
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