

0000	10	*=	%F000
F000	D003	15	BNE NLR
F002	AE7F04	20	LDX %047F
F005	8E8A02	25	NLR STX %028A
F008	4CD6EF	30	JMP %EFD6
F00B	C63F	35	ATEOF DEC %3F
F00D	A088	40	ISEOF LDY ##88
F00F	60	45	RTS
F010	A63D	50	PBYTE LDX %3D
F012	9D0004	55	STA %0400.X
F015	E63D	60	INC %3D
F017	A001	65	LDY #1
F019	E07F	70	CPX #127
F01B	F001	75	BEQ *+3
F01D	60	80	RTS
F01E	A9FC	85	LDA ##FC
F020	20D2F0	90	JSR WSIO5B
F023	A900	95	LDA #0
F025	853D	0100	STA %3D
F027	60	0105	RTS
F028	A001	0110	STATU LDY #1
F02A	60	0115	RTS
F02B	AD8902	0120	CLOSEC LDA %0289
F02E	3008	0125	BMI CLWRT
F030	A001	0130	LDY #1
F032	A93C	0135	FCAX LDA ##3C
F034	8D02D3	0140	STA %D302
F037	60	0145	RTS
F038	A63D	0150	CLWRT LDX %3D
F03A	F00A	0155	BEQ WTLR
F03C	8E7F04	0160	STX %047F
F03F	A9FA	0165	LDA ##FA
F041	20D2F0	0170	JSR WSIO5B
F044	30EC	0175	BMI FCAX
F046	A27F	0180	WTLR LDX #127
F048	A900	0185	LDA #0
F04A	9D0004	0190	ZTBUF STA %0400.X
F04D	CA	0195	DEX
F04E	10FA	0200	BPL ZTBUF
F050	A9FE	0205	LDA ##FE
F052	20D2F0	0210	JSR WSIO5B
F055	4C32F0	0215	JMP FCAX
F058	8540	0220	BEEP STA %40
F05A	A514	0225	BEEP1 LDA %14
F05C	18	0230	CLC
F05D	691E	0235	ADC #30
F05F	AA	0240	TAX
F060	A9FF	0245	WFL LDA ##FF
F062	8D1FD0	0250	STA %D01F
F065	A900	0255	LDA #0
F067	A0F0	0260	LDY ##F0
F069	88	0265	DEY
F06A	D0FD	0270	BNE *-1
F06C	8D1FD0	0275	STA %D01F
F06F	A0F0	0280	LDY ##F0
F071	88	0285	DEY
F072	D0FD	0290	BNE *-1
F074	E414	0295	CPX #14
F076	D0E8	0300	BNE WFL
F078	C640	0305	DEC %40
F07A	F00B	0310	BEQ WFAK

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F07C	8A	0315	TXA
F07D	18	0320	CLC
F07E	690A	0325	ADC #10
F080	AA	0330	TAX
F081	E414	0335	CPX #14
F083	D0FC	0340	BNE *-2
F085	F0D3	0345	BEQ BEEP1
F087	208CF0	0350	WFAK JSR WFAK1
F08A	98	0355	TYA
F08B	60	0360	RTS
F08C	AD25E4	0365	WFAK1 LDA \$E425
F08F	48	0370	PHA
F090	AD24E4	0375	LDA \$E424
F093	48	0380	PHA
F094	60	0385	RTS
F095	8D0203	0390	SIO5B STA #0302
F098	A900	0395	LDA #0
F09A	8D0903	0400	STA \$0309
F09D	A983	0405	LDA #131
F09F	8D0803	0410	STA \$0308
FOA2	A903	0415	LDA #3
FOA4	8D0503	0420	STA \$0305
FOA7	A9FD	0425	LDA ##FD
FOA9	8D0403	0430	STA \$0304
FOAC	A960	0435	CSIO LDA ##60
FOAE	8D0003	0440	STA \$0300
FOB1	A900	0445	LDA #0
FOB3	8D0103	0450	STA \$0301
FOB6	A923	0455	LDA #35
FOB8	8D0603	0460	STA \$0306
FOBB	AD0203	0465	LDA \$0302
FOBE	A040	0470	LDY ##40
FOC0	C952	0475	CMP ##52
FOC2	F002	0480	BEQ *+4
FOC4	A080	0485	LDY ##80
FOC6	BC0303	0490	STY \$0303
FOC9	A53E	0495	LDA \$3E
FOCB	8D0B03	0500	STA \$030B
FOCE	2059E4	0505	JSR \$E459
FOD1	60	0510	RTS
FOD2	8DFF03	0515	WSIO5B STA \$03FF
FOD5	A955	0520	LDA ##55
FOD7	8DFD03	0525	STA \$03FD
FODA	8DFE03	0530	STA \$03FE
FODD	A957	0535	LDA ##57
FODF	2095F0	0540	JSR SIO5B
FOE2	60	0545	RTS
FOE3	50	0550	TBLENT .BYTE 'P '
FOE4	30E4	0555	.BYTE \$30,\$E4
FOE6	43	0560	.BYTE 'C '
FOE7	40E4	0565	.BYTE \$40,\$E4
FOE9	45	0570	.BYTE 'E '
FOEA	00E4	0575	.BYTE \$00,\$E4
FOEC	53	0580	.BYTE 'S '
FOED	10E4	0585	.BYTE \$10,\$E4
FOEF	4B	0590	.BYTE 'K '
FOFO	20E4	0595	.BYTE \$20,\$E4
	=000E	0600	TBLLEN = 14
FOF2	A23F	0605	CLICK LDX ##3F
FOF4	8E1FD0	0610	CLICK1 STX #D01F
FOF7	8E0AD4	0615	STX \$D40A

FOFA CA	0620	DEX
FOFB 10F7	0625	BPL CLICK1
FOFD 60	0630	RTS
FOFE A900	0635	COLCR LDA #0
F100 A67B	0640	LDX \$7B
F102 D004	0645	BNE COLCR1
F104 A657	0650	LDX \$57
F106 D002	0655	BNE COLCR2
F108 A552	0660	COLCR1 LDA \$52
F10A 8555	0665	COLCR2 STA \$55
F10C 60	0670	RTS
F10D 424F4F54	0675	DERR5 .BYTE "BOOT ERROR".\$9B
F111 20455252		
F115 4F529B		
=00F1	0680	DERRH = DERR5/256
=000D	0685	DERRL = DERR5&255
F118 453A9B	0690	OPNETD .BYTE "E:". \$9B
=00F1	0695	OPNH = OPNETD/256
=0018	0700	OPNL = OPNETD&255
F11B 78	0705	RESET SEI
F11C AD4402	0710	LDA \$0244
F11F D004	0715	BNE PWRUP
F121 A9FF	0720	LDA #\$FF
F123 D003	0725	BNE PWRUP1
F125 78	0730	PWRUP SEI
F126 A900	0735	LDA #0
F128 8508	0740	PWRUP1 STA \$08
F12A DB	0745	CLD
F12B A2FF	0750	LDX #\$FF
F12D 9A	0755	TXS
F12E 203FF2	0760	JSR SPECL
F131 2077F2	0765	JSR HARDI
F134 A508	0770	LDA \$08
F136 D028	0775	BNE ZOSRAM
F138 A900	0780	ZERORM LDA #0
F13A A008	0785	LDY #8
F13C 8504	0790	STA \$04
F13E 8505	0795	STA \$05
F140 9104	0800	CLRRAM STA (\$04),Y
F142 C8	0805	INY
F143 C000	0810	CPY #0
F145 D0F9	0815	BNE CLRRAM
F147 E605	0820	INC \$05
F149 A605	0825	LDX \$05
F14B E406	0830	CPX \$06
F14D D0F1	0835	BNE CLRRAM
F14F AD72E4	0840	LDA \$E472
F152 850A	0845	STA \$0A
F154 AD73E4	0850	LDA \$E473
F157 850B	0855	STA \$0B
F159 A9FF	0860	LDA #\$FF
F15B 8D4402	0865	STA \$0244
F15E D013	0870	BNE ESTSCM
F160 A200	0875	ZOSRAM LDX #0
F162 8A	0880	TXA
F163 9D0002	0885	ZOSRM2 STA \$0200,X
F166 9D0003	0890	STA \$0300,X
F169 CA	0895	DEX
F16A D0F7	0900	BNE ZOSRM2
F16C A210	0905	LDX #\$10
F16E 9500	0910	ZOSRM3 STA 0,X

F170	E8	0915	INX
F171	10FB	0920	BPL ZOSRM3
F173	A902	0925	ESTSCM LDA #2
F175	8552	0930	STA #52
F177	A927	0935	LDA #39
F179	8553	0940	STA #53
F17B	A225	0945	OPSYS LDX ##25
F17D	BD80E4	0950	MOVVEC LDA #E480,X
F180	9D0002	0955	STA \$0200,X
F183	CA	0960	DEX
F184	10F7	0965	BPL MOVVEC
F186	20BAF2	0970	JSR OSRAM
F189	58	0975	CLI
F18A	A20E	0980	LDX #TBLLN
F18C	BDE3F0	0985	NXTENT LDA TBLENT,X
F18F	9D1A03	0990	STA \$031A,X
F192	CA	0995	DEX
F193	10F7	1000	BPL NXTENT
F195	A200	1005	LDX #0
F197	8607	1010	STX \$07
F199	8606	1015	STX \$06
F19B	AEE402	1020	LDX \$02E4
F19E	E090	1025	CPX ##90
F1A0	B00A	1030	BCS ENDBCK
F1A2	ADFC9F	1035	LDA \$9FFC
F1A5	D005	1040	BNE ENDBCK
F1A7	E607	1045	INC \$07
F1A9	203CF2	1050	JSR CBINI
F1AC	AEE402	1055	ENDBCK LDX \$02E4
F1AF	E0B0	1060	CPX ##B0
F1B1	B00A	1065	BCS ENDACK
F1B3	AEFCBF	1070	LDX #BFFC
F1B6	D005	1075	BNE ENDACK
F1B8	E606	1080	INC \$06
F1BA	2039F2	1085	JSR CAINI
F1BD	A903	1090	ENDACK LDA #3
F1BF	A200	1095	LDX #0
F1C1	9D4203	1100	STA \$0342,X
F1C4	A918	1105	LDA #OPNL
F1C6	9D4403	1110	STA \$0344,X
F1C9	A9F1	1115	LDA #OPNH
F1CB	9D4503	1120	STA \$0345,X
F1CE	A90C	1125	LDA ##0C
F1D0	9D4A03	1130	STA \$034A,X
F1D3	2056E4	1135	JSR \$E456
F1D6	1003	1140	BPL SCRNOK
F1D8	4C25F1	1145	JMP PWRUP
F1DB	E8	1150	SCRNOK INX
F1DC	DOFD	1155	BNE SCRNOK
F1DE	C8	1160	INX
F1DF	10FA	1165	BPL SCRNOK
F1E1	209EF3	1170	JSR CSBOOT
F1E4	A506	1175	LDA \$06
F1E6	0507	1180	ORA \$07
F1E8	F012	1185	BEG NOCART
F1EA	A506	1190	LDA \$06
F1EC	F003	1195	BEG NOA1
F1EE	ADFD9F	1200	LDA #BFFD
F1F1	A607	1205	NOA1 LDX \$07
F1F3	F003	1210	BEG NOB1
F1F5	ODFD9F	1215	ORA \$9FFD

F1F8	2901	1220	NOB1 AND #1
F1FA	F003	1225	BEQ NOBOOT
F1FC	20CFF2	1230	NOCART JSR BOOT
F1FF	A900	1235	NOBOOT LDA #0
F201	8D4402	1240	STA \$0244
F204	A506	1245	LDA #06
F206	F00A	1250	BEQ NOA2
F208	ADFD9F	1255	LDA \$BFFD
F20B	2904	1260	AND #4
F20D	F003	1265	BEQ NOA2
F20F	6CFABF	1270	JMP (\$BFFA)
F212	A507	1275	NOA2 LDA #07
F214	F00A	1280	BEQ NOCAR2
F216	ADFD9F	1285	LDA \$9FFD
F219	2904	1290	AND #4
F21B	F0DF	1295	BEQ NOCART
F21D	6CFA9F	1300	JMP (\$9FFA)
F220	6C0A00	1305	NOCAR2 JMP (#0A)
F223	203EF6	1310	BLACKB JSR EGETCH
F226	4C23F2	1315	JMP BLACKB
F229	A22D	1320	TSTCTL LDX #45
F22B	BDCEFE	1325	TSTCT1 LDA CNTRLS,X
F22E	CDFB02	1330	CMP \$02FB
F231	F005	1335	BEQ TSTCT2
F233	CA	1340	DEX
F234	CA	1345	DEX
F235	CA	1350	DEX
F236	10F3	1355	BPL TSTCT1
F238	60	1360	TSTCT2 RTS
F239	6CFEBF	1365	CAINI JMP (\$BFFE)
F23C	6CFE9F	1370	CBINI JMP (\$9FFE)
F23F	ADFCBF	1375	SPECL LDA \$BFFC
F242	D013	1380	BNE ENSPE2
F244	EEFCBF	1385	INC \$BFFC
F247	ADFCBF	1390	LDA \$BFFC
F24A	D008	1395	BNE ENSPEC
F24C	ADFD9F	1400	LDA \$BFFD
F24F	1003	1405	BPL ENSPEC
F251	6CFEBF	1410	JMP (\$BFFE)
F254	DEFCBF	1415	ENSPEC DEC \$BFFC
F257	A000	1420	ENSPE2 LDY #0
F259	8405	1425	STY #05
F25B	A910	1430	LDA #\$10
F25D	8506	1435	STA #06
F25F	B105	1440	HOWMCH LDA (\$05),Y
F261	49FF	1445	EOR #\$FF
F263	9105	1450	STA (\$05),Y
F265	D105	1455	CMP (\$05),Y
F267	D00D	1460	BNE ENDRAM
F269	49FF	1465	EOR #\$FF
F26B	9105	1470	STA (\$05),Y
F26D	A506	1475	LDA #06
F26F	18	1480	CLC
F270	6910	1485	ADC #\$10
F272	8506	1490	STA #06
F274	DOE9	1495	BNE HOWMCH
F276	60	1500	ENDRAM RTS
F277	A900	1505	HARDI LDA #0
F279	AA	1510	TAX
F27A	9D00D0	1515	CLRCHP STA \$D000,X
F27D	9D00D4	1520	STA \$D400,X

F280	9D00D2	1525	STA \$D200,X
F283	9D00D3	1530	STA \$D300,X
F286	E8	1535	INX
F287	DOF1	1540	BNE CLRCHF
F289	60	1545	RTS
F28A	C611	1550	OSRAM DEC \$11
F28C	A954	1555	LDA ##54
F28E	8D3602	1560	STA \$0236
F291	A9E7	1565	LDA ##E7
F293	8D3702	1570	STA \$0237
F296	A506	1575	LDA \$06
F298	8DE402	1580	STA \$02E4
F29B	8DE602	1585	STA \$02E6
F29E	A900	1590	LDA #0
F2A0	8DE502	1595	STA \$02E5
F2A3	8DE702	1600	STA \$02E7
F2A6	EA	1605	NOP
F2A7	EA	1610	NOP
F2A8	A907	1615	LDA #7
F2AA	8DE802	1620	STA \$02E8
F2AD	200CE4	1625	JSR \$E40C
F2B0	201CE4	1630	JSR \$E41C
F2B3	202CE4	1635	JSR \$E42C
F2B6	203CE4	1640	JSR \$E43C
F2B9	204CE4	1645	JSR \$E44C
F2BC	206EE4	1650	JSR \$E46E
F2BF	2065E4	1655	JSR \$E465
F2C2	206BE4	1660	JSR \$E46B
F2C5	AD1FD0	1665	LDA \$D01F
F2C8	2901	1670	AND #1
F2CA	D002	1675	BNE NOKEY
F2CC	E64A	1680	INC \$4A
F2CE	60	1685	NOKEY RTS
F2CF	A508	1690	BOOT LDA \$08
F2D1	F00A	1695	BEG NOWARM
F2D3	A509	1700	LDA \$09
F2D5	2901	1705	AND #1
F2D7	F003	1710	BEG NOINIT
F2D9	207EF3	1715	JSR DINI
F2DC	60	1720	NOINIT RTS
F2DD	A901	1725	NOWARM LDA #1
F2DF	8D0103	1730	STA \$0301
F2E2	A953	1735	LDA ##53
F2E4	8D0203	1740	STA \$0302
F2E7	2053E4	1745	JSR \$E453
F2EA	1001	1750	BPL DOBOOT
F2EC	60	1755	RTS
F2ED	A900	1760	DOBOOT LDA #0
F2EF	8D0B03	1765	STA \$030B
F2F2	8D0403	1770	STA \$0304
F2F5	A901	1775	LDA #1
F2F7	8D0A03	1780	STA \$030A
F2FA	A904	1785	LDA #4
F2FC	8D0503	1790	STA \$0305
F2FF	EA	1795	NOP
F300	EA	1800	NOP
F301	20C0FC	1805	SECT1 JSR GETSEC
F304	1008	1810	BPL ALLSEC
F306	2081F3	1815	BADDSK JSR DSKRDE
F309	A54B	1820	LDA \$4B
F30B	FOE0	1825	BEG DOBOOT

F30D	60	1830	RTS
F30E	A203	1835	ALLSEC LDX #3
F310	BD0004	1840	RDBYTE LDA \$0400,X
F313	9D4002	1845	STA \$0240,X
F316	CA	1850	DEX
F317	10F7	1855	BPL RDBYTE
F319	AD4202	1860	LDA \$0242
F31C	8504	1865	STA \$04
F31E	AD4302	1870	LDA \$0243
F321	8505	1875	STA \$05
F323	AD0404	1880	LDA \$0404
F326	850C	1885	STA \$0C
F328	AD0504	1890	LDA \$0405
F32B	850D	1895	STA \$0D
F32D	A07F	1900	MVBUFF LDY #\$7F
F32F	B90004	1905	MVNXB LDA \$0400,Y
F332	9104	1910	STA (\$04),Y
F334	8B	1915	DEY
F335	10F8	1920	BPL MVNXB
F337	1B	1925	CLC
F338	A504	1930	LDA \$04
F33A	6980	1935	ADC #\$80
F33C	8504	1940	STA \$04
F33E	A505	1945	LDA \$05
F340	6900	1950	ADC #0
F342	8505	1955	STA \$05
F344	CE4102	1960	DEC \$0241
F347	F011	1965	BEQ ENBOOT
F349	EE0A03	1970	INC \$030A
F34C	20C0FC	1975	SECTX JSR GETSEC
F34F	10DC	1980	BPL MVBUFF
F351	20B1F3	1985	JSR DSKRDE
F354	A54B	1990	LDA \$4B
F356	DOAE	1995	BNE BADDISK
F358	F0F2	2000	BEQ SECTX
F35A	A54B	2005	ENBOOT LDA \$4B
F35C	F003	2010	BEQ XBOOT
F35E	20C0FC	2015	JSR GETSEC
F361	206CF3	2020	XBOOT JSR BLOAD
F364	B0A0	2025	BCS BADDISK
F366	207EF3	2030	JSR DINI
F369	E609	2035	INC \$09
F36B	60	2040	RTS
F36C	1B	2045	BLOAD CLC
F36D	AD4202	2050	LDA \$0242
F370	6906	2055	ADC #6
F372	8504	2060	STA \$04
F374	AD4302	2065	LDA \$0243
F377	6900	2070	ADC #0
F379	8505	2075	STA \$05
F37B	6C0400	2080	JMP (\$04)
F37E	6C0C00	2085	DINI JMP (\$0C)
F381	A20D	2090	DSKRDE LDX #DERRL
F383	A0F1	2095	LDY #DERRH
F385	8A	2100	PUTLIN TXA
F386	A200	2105	LDX #0
F388	9D4403	2110	STA \$0344,X
F38B	9B	2115	TYA
F38C	9D4503	2120	STA \$0345,X
F38F	A909	2125	LDA #9
F391	9D4203	2130	STA \$0342,X

F394	A9FF	2135	LDA ##FF
F396	9D4803	2140	STA #0348, X
F399	4C56E4	2145	JMP \$E456
F39C	EA	2150	NOF
F39D	EA	2155	NOF
F39E	A508	2160	CSBOOT LDA #08
F3A0	F00A	2165	BEQ CSBOT2
F3A2	A509	2170	LDA #09
F3A4	2902	2175	AND #2
F3A6	F003	2180	BEQ NOCSB2
F3A8	20CDF3	2185	JSR CINI
F3AB	60	2190	NOCBS2 RTS
F3AC	A54A	2195	CSBOT2 LDA \$4A
F3AE	F01C	2200	BEQ NOCSBT
F3B0	A980	2205	LDA ##80
F3B2	853E	2210	STA \$3E
F3B4	E64B	2215	INC \$4B
F3B6	207DE4	2220	JSR \$E47D
F3B9	2001F3	2225	JSR SECT1
F3BC	A900	2230	LDA #0
F3BE	854B	2235	STA \$4B
F3C0	854A	2240	STA \$4A
F3C2	0609	2245	ASL \$09
F3C4	A50C	2250	LDA \$0C
F3C6	8502	2255	STA \$02
F3C8	A50D	2260	LDA \$0D
F3CA	8503	2265	STA \$03
F3CC	60	2270	NOCGBT RTS
F3CD	6C0200	2275	CINI JMP (\$02)
F3D0	A9FF	2280	PWRONA LDA ##FF
F3D2	8DFC02	2285	STA \$02FC
F3D5	ADE602	2290	LDA \$02E6
F3D8	29F0	2295	AND ##F0
F3DA	856A	2300	STA \$6A
F3DC	A940	2305	LDA ##40
F3DE	8DBE02	2310	STA \$02BE
F3E1	60	2315	RTS
F3E2	A52B	2320	DOPEN LDA \$2B
F3E4	290F	2325	AND ##0F
F3E6	D008	2330	BNE OPNCOM
F3E8	A52A	2335	EOPEN LDA \$2A
F3EA	290F	2340	AND ##0F
F3EC	852A	2345	STA \$2A
F3EE	A900	2350	LDA #0
F3F0	8557	2355	OPNCOM STA \$57
F3F2	A9E0	2360	LDA ##E0
F3F4	8DF402	2365	STA \$02F4
F3F7	A902	2370	LDA #2
F3F9	8DF302	2375	STA \$02F3
F3FC	8D2F02	2380	STA \$022F
F3FF	A901	2385	LDA #1
F401	854C	2390	STA \$4C
F403	A00E	2395	LDY #14
F405	99A302	2400	CLRTBS STA \$02A3.Y
F408	88	2405	DEY
F409	10FA	2410	BPL CLRTBS
F40B	A9C0	2415	LDA ##C0
F40D	0510	2420	ORA \$10
F40F	8510	2425	STA \$10
F411	8D0ED2	2430	STA \$D20E
F414	A900	2435	LDA #0

F416	8D9302	2440	STA \$0293
F419	8564	2445	STA \$64
F41B	857B	2450	STA \$7B
F41D	8DF002	2455	STA \$02F0
F420	A204	2460	LDX #4
F422	BDC9FE	2465	DOPENB LDA COLRTB,X
F425	9DC402	2470	STA \$02C4,X
F428	CA	2475	DEX
F429	10F7	2480	BPL DOPENB
F42B	A46A	2485	LDY \$6A
F42D	88	2490	DEY
F42E	8C9502	2495	STY \$0295
F431	A960	2500	LDA ##60
F433	8D9402	2505	STA \$0294
F436	A657	2510	LDX \$57
F438	BD55FE	2515	LDA ANCONV,X
F43B	D004	2520	BNE DOPENA
F43D	A991	2525	DPNERR LDA ##91
F43F	854C	2530	STA \$4C
F441	8551	2535	DOPENA STA \$51
F443	A56A	2540	LDA \$6A
F445	8565	2545	STA \$65
F447	BC25FE	2550	LDY ALOCAT,X
F44A	A928	2555	DOPEN1 LDA #40
F44C	2021F9	2560	JSR DBSUB
F44F	88	2565	DEY
F450	D0F8	2570	BNE DOPEN1
F452	AD6F02	2575	LDA \$026F
F455	293F	2580	AND ##3F
F457	8567	2585	STA \$67
F459	A8	2590	TAY
F45A	E008	2595	CPX #8
F45C	901F	2600	BCC NOT8
F45E	E00F	2605	CPX #15
F460	FOOD	2610	BEG MODE15
F462	E00C	2615	CPX #12
F464	B017	2620	BCS NOT8
F466	8A	2625	TXA
F467	6A	2630	ROR A
F468	6A	2635	ROR A
F469	6A	2640	ROR A
F46A	29C0	2645	AND ##C0
F46C	0567	2650	ORA \$67
F46E	A8	2655	TAY
F46F	A910	2660	MODE15 LDA #16
F471	2021F9	2665	JSR DBSUB
F474	E00B	2670	CPX #11
F476	D005	2675	BNE NOT8
F478	A906	2680	LDA #6
F47A	8DC802	2685	STA \$02C8
F47D	8C6F02	2690	NOT8 STY \$026F
F480	A564	2695	LDA \$64
F482	8558	2700	STA \$58
F484	A565	2705	LDA \$65
F486	8559	2710	STA \$59
F488	AD0BD4	2715	VBWAIT LDA \$D40B
F48B	C97A	2720	CMP ##7A
F48D	D0F9	2725	BNE VBWAIT
F48F	201FF9	2730	JSR DBDEC
F492	BD65FE	2735	LDA PAGETB,X
F495	FO06	2740	BEG NOMOD

F497	A9FF	2745	LDA ##FF
F499	8564	2750	STA \$64
F49B	C665	2755	DEC \$65
F49D	A564	2760	NOMOD LDA \$64
F49F	8568	2765	STA \$68
F4A1	A565	2770	LDA \$65
F4A3	8569	2775	STA \$69
F4A5	2013F9	2780	JSR DBDDEC
F4A8	A941	2785	LDA ##41
F4AA	2017F9	2790	JSR STORE
F4AD	8666	2795	STX \$66
F4AF	A918	2800	LDA #24
F4B1	8DBF02	2805	STA \$02BF
F4B4	A557	2810	LDA \$57
F4B6	C90C	2815	CMP #12
F4B8	B004	2820	BCS MODE12
F4BA	C909	2825	CMP #9
F4BC	B02D	2830	BCS NOTMXD
F4BE	A52A	2835	MODE12 LDA \$2A
F4C0	2910	2840	AND ##10
F4C2	F027	2845	BEQ NOTMXD
F4C4	A904	2850	LDA #4
F4C6	8DBF02	2855	STA \$02BF
F4C9	A202	2860	LDX #2
F4CB	A902	2865	DOPEN2 LDA #2
F4CD	2017F9	2870	JSR STORE
F4D0	CA	2875	DEX
F4D1	10F8	2880	BPL DOPEN2
F4D3	A46A	2885	LDY \$6A
F4D5	88	2890	DEY
F4D6	98	2895	TYA
F4D7	2017F9	2900	JSR STORE
F4DA	A960	2905	LDA ##60
F4DC	2017F9	2910	JSR STORE
F4DF	A942	2915	LDA ##42
F4E1	2017F9	2920	JSR STORE
F4E4	18	2925	CLC
F4E5	A910	2930	LDA #MXDMDE--NUMDLE
F4E7	6566	2935	ADC \$66
F4E9	8566	2940	STA \$66
F4EB	A466	2945	NOTMXD LDY \$66
F4ED	BE35FE	2950	LDX NUMDLE.Y
F4F0	A551	2955	DOPEN3 LDA \$51
F4F2	2017F9	2960	JSR STORE
F4F5	CA	2965	DEX
F4F6	D0F8	2970	BNE DOPEN3
F4F8	A557	2975	LDA \$57
F4FA	C908	2980	CMP #8
F4FC	9026	2985	BCC DOPEN5
F4FE	C90F	2990	CMP #15
F500	F004	2995	BEQ MDE15
F502	C90C	3000	CMP #12
F504	B01E	3005	BCS DOPEN5
F506	A25D	3010	MDE15 LDX #93
F508	A56A	3015	LDA \$6A
F50A	38	3020	SEC
F50B	E910	3025	SBC ##10
F50D	2017F9	3030	JSR STORE
F510	A900	3035	LDA #0
F512	2017F9	3040	JSR STORE
F515	A551	3045	LDA \$51

F517	0940	3050	ORA ##40
F519	2017F9	3055	JSR STORE
F51C	A551	3060	DOPEN4 LDA #51
F51E	2017F9	3065	JSR STORE
F521	CA	3070	DEX
F522	D0F8	3075	BNE DOPEN4
F524	A559	3080	DOPEN5 LDA #59
F526	2017F9	3085	JSR STORE
F529	A558	3090	LDA #58
F52B	2017F9	3095	JSR STORE
F52E	A551	3100	LDA #51
F530	0940	3105	ORA ##40
F532	2017F9	3110	JSR STORE
F535	A970	3115	LDA ##70
F537	2017F9	3120	JSR STORE
F53A	A970	3125	LDA ##70
F53C	2017F9	3130	JSR STORE
F53F	A564	3135	LDA #64
F541	8D3002	3140	STA \$0230
F544	A565	3145	LDA #65
F546	8D3102	3150	STA \$0231
F549	A970	3155	LDA ##70
F54B	2017F9	3160	JSR STORE
F54E	A564	3165	LDA #64
F550	8DE502	3170	STA \$02E5
F553	A565	3175	LDA #65
F555	8DE602	3180	STA \$02E6
F558	A568	3185	LDA #68
F55A	8564	3190	STA #64
F55C	A569	3195	LDA #69
F55E	8565	3200	STA #65
F560	AD3102	3205	LDA \$0231
F563	2017F9	3210	JSR STORE
F566	AD3002	3215	LDA \$0230
F569	2017F9	3220	JSR STORE
F56C	A54C	3225	LDA #4C
F56E	1007	3230	BPL DOPEN9
F570	48	3235	PHA
F571	20E8F3	3240	JSR EOPEN
F574	68	3245	PLA
F575	A8	3250	TAY
F576	60	3255	RTS
F577	A52A	3260	DOPEN9 LDA #2A
F579	2920	3265	AND ##20
F57B	D00B	3270	BNE DOPEN7
F57D	20B9F7	3275	JSR CLRSCR
F580	8D9002	3280	STA \$0290
F583	A552	3285	LDA #52
F585	8D9102	3290	STA \$0291
F588	A922	3295	DOPEN7 LDA ##22
F58A	0D2F02	3300	ORA \$022F
F58D	8D2F02	3305	STA \$022F
F590	4C21F6	3310	JMP RETUR2
F593	2096FA	3315	GETCH JSR RANGE
F596	20A2F5	3320	JSR GETPLT
F599	2032FB	3325	JSR INATAC
F59C	20D4F9	3330	JSR INCRSB
F59F	4C34F6	3335	JMP RETUR1
F5A2	2047F9	3340	GETPLT JSR CONVRT
F5A5	B164	3345	LDA (\$64),Y
F5A7	2DA002	3350	AND \$02A0

F5AA	466F	3355	SHIFTD LSR #6F
F5AC	B003	3360	BCS SHIFT1
F5AE	4A	3365	LSR A
F5AF	10F9	3370	BPL SHIFTD
F5B1	8DFA02	3375	SHIFT1 STA #02FA
F5B4	C900	3380	CMP #0
F5B6	60	3385	RTS
F5B7	8DFB02	3390	OUTCH STA #02FB
F5BA	2096FA	3395	JSR RANGE
F5BD	ADFB02	3400	OUTCHA LDA #02FB
F5C0	C97D	3405	CMP #\$7D
F5C2	D006	3410	BNE OUTCHE
F5C4	20B9F7	3415	JSR CLRSCR
F5C7	4C21F6	3420	JMP RETUR2
F5CA	ADFB02	3425	OUTCHE LDA #02FB
F5CD	C99B	3430	CMP #\$9B
F5CF	D006	3435	BNE OUTCHB
F5D1	2030FA	3440	JSR DOCRWS
F5D4	4C21F6	3445	JMP RETUR2
F5D7	20E0F5	3450	OUTCHB JSR OUTPLT
F5DA	20D8F9	3455	JSR INCRSR
F5DD	4C21F6	3460	JMP RETUR2
F5E0	ADFF02	3465	OUTPLT LDA #02FF
F5E3	D0FB	3470	BNE OUTPLT
F5E5	A202	3475	LDX #2
F5E7	B554	3480	CRLOOP LDA #54,X
F5E9	955A	3485	STA #5A,X
F5EB	CA	3490	DEX
F5EC	10F9	3495	BPL CRLOOP
F5EE	ADFB02	3500	LDA #02FB
F5F1	A8	3505	TAY
F5F2	2A	3510	ROL A
F5F3	2A	3515	ROL A
F5F4	2A	3520	ROL A
F5F5	2A	3525	ROL A
F5F6	2903	3530	AND #3
F5F8	AA	3535	TAX
F5F9	9B	3540	TYA
F5FA	299F	3545	AND #\$9F
F5FC	1DFOFF	3550	ORA ATAINI,X
F5FF	8DFA02	3555	OUTCH2 STA #02FA
F602	2047F9	3560	JSR CONVRT
F605	ADFA02	3565	LDA #02FA
F608	466F	3570	SHIFTU LSR #6F
F60A	B004	3575	BCS SHIFT2
F60C	0A	3580	ASL A
F60D	4C08F6	3585	JMP SHIFTU
F610	2DA002	3590	SHIFT2 AND #02A0
F613	8550	3595	STA #50
F615	ADA002	3600	LDA #02A0
F618	49FF	3605	EOR #\$FF
F61A	3164	3610	AND (#64),Y
F61C	0550	3615	ORA #50
F61E	9164	3620	STA (#64),Y
F620	60	3625	RTS
F621	20A2F5	3630	RETUR2 JSR GETPLT
F624	855D	3635	STA #5D
F626	A657	3640	LDX #57
F628	D00A	3645	BNE RETUR1
F62A	AEF002	3650	LDX #02F0
F62D	D005	3655	BNE RETUR1

F62F	4980	3660	EOR ##80
F631	20FFF5	3665	JSR OUTCH2
F634	A44C	3670	RETUR1 LDY \$4C
F636	A901	3675	LDA #1
F638	854C	3680	STA \$4C
F63A	ADFB02	3685	LDA \$02FB
F63D	60	3690	NOFUNC RTS
F63E	209BFC	3695	EGETCH JSR SWAP
F641	2088FA	3700	JSR ERANGE
F644	A56B	3705	LDA \$6B
F646	D034	3710	BNE EGETC3
F648	A554	3715	LDA \$54
F64A	856C	3720	STA \$6C
F64C	A555	3725	LDA \$55
F64E	856D	3730	STA \$6D
F650	20E2F6	3735	EGETC1 JSR KGETCH
F653	844C	3740	STY \$4C
F655	ADFB02	3745	LDA \$02FB
F658	C99B	3750	CMP ##9B
F65A	F012	3755	BEQ EGETC2
F65C	20ADF6	3760	JSR DOSS
F65F	209BFC	3765	JSR SWAP
F662	A563	3770	LDA \$63
F664	C971	3775	CMP #113
F666	D003	3780	BNE EGETC6
F668	200AF9	3785	JSR BELL
F66B	4C50F6	3790	EGETC6 JMP EGETC1
F66E	20E4FA	3795	EGETC2 JSR OFFCRS
F671	20F8FB	3800	JSR DOBUFC
F674	A56C	3805	LDA \$6C
F676	8554	3810	STA \$54
F678	A56D	3815	LDA \$6D
F67A	8555	3820	STA \$55
F67C	A56B	3825	EGETC3 LDA \$6B
F67E	F011	3830	BEQ EGETC5
F680	C66B	3835	EGETC7 DEC \$6B
F682	FOOD	3840	BEQ EGETC5
F684	A54C	3845	LDA \$4C
F686	30F8	3850	BMI EGETC7
F688	2093F5	3855	JSR GETCH
F68B	8DFB02	3860	STA \$02FB
F68E	4C9BFC	3865	JMP SWAP
F691	2030FA	3870	EGETC5 JSR DOCRWS
F694	A99B	3875	LDA ##9B
F696	8DFB02	3880	STA \$02FB
F699	2021F6	3885	JSR RETUR2
F69C	844C	3890	STY \$4C
F69E	4C9BFC	3895	JMP SWAP
F6A1	6C6400	3900	JSRIND JMP (\$64)
F6A4	8DFB02	3905	EOUTCH STA \$02FB
F6A7	209BFC	3910	JSR SWAP
F6AA	2088FA	3915	JSR ERANGE
F6AD	20E4FA	3920	DOSS JSR OFFCRS
F6B0	2029F2	3925	JSR TSTCTL
F6B3	F009	3930	BEQ EOUTC5
F6B5	0EA202	3935	EOUTC6 ASL \$02A2
F6B8	20CAF5	3940	JSR OUTCHE
F6BB	4C9BFC	3945	ERETN JMP SWAP
F6BE	ADFE02	3950	EOUTC5 LDA \$02FE
F6C1	0DA202	3955	ORA \$02A2
F6C4	DOEF	3960	BNE EOUTC6

F6C6	0EA202	3965	ASL	%02A2
F6C9	EB	3970	INX	
F6CA	BDCEFE	3975	LDA	CNTRLS,X
F6CD	8564	3980	STA	%64
F6CF	BDCFFE	3985	LDA	CNTRLS+1,X
F6D2	8565	3990	STA	%65
F6D4	20A1F6	3995	JSR	JSRIND
F6D7	2021F6	4000	JSR	RETUR2
F6DA	4C9BFC	4005	JMP	SWAP
F6DD	A9FF	4010	KGETC2	LDA %%FF
F6DF	8DFC02	4015	STA	%02FC
F6E2	A52A	4020	KGETCH	LDA %2A
F6E4	4A	4025	LSR	A
F6E5	B062	4030	BCS	GETOUT
F6E7	A980	4035	LDA	%%80
F6E9	A611	4040	LDX	%11
F6EB	F058	4045	BEQ	K7
F6ED	ADFC02	4050	LDA	%02FC
F6F0	C9FF	4055	CMP	%%FF
F6F2	F0EE	4060	BEQ	KGETCH
F6F4	857C	4065	STA	%7C
F6F6	A2FF	4070	LDX	%%FF
F6F8	8EFC02	4075	STX	%02FC
F6FB	20F2F0	4080	JSR	CLICK
F6FE	AA	4085	KGETC3	TAX
F6FF	E0C0	4090	CPX	%%C0
F701	9002	4095	BCC	ASCC01
F703	A203	4100	LDX	%3
F705	BDFEFE	4105	ASCC01	LDA ATASCI,X
F708	BDFB02	4110	STA	%02FB
F70B	C980	4115	CMP	%%80
F70D	F0CE	4120	BEQ	KGETC2
F70F	C981	4125	CMP	%%81
F711	D00B	4130	BNE	KGETC1
F713	ADB602	4135	LDA	%02B6
F716	4980	4140	EDR	%%80
F718	8DB602	4145	STA	%02B6
F71B	4CDDF6	4150	JMP	KGETC2
F71E	C982	4155	KGETC1	CMP %%82
F720	D007	4160	BNE	K1
F722	A900	4165	LDA	%0
F724	8DBE02	4170	STA	%02BE
F727	F0B4	4175	BEQ	KGETC2
F729	C983	4180	K1	CMP %%83
F72B	D007	4185	BNE	K2
F72D	A940	4190	LDA	%%40
F72F	8DBE02	4195	STA	%02BE
F732	D0A9	4200	BNE	KGETC2
F734	C984	4205	K2	CMP %%84
F736	D007	4210	BNE	K3
F738	A980	4215	LDA	%%80
F73A	8DBE02	4220	STA	%02BE
F73D	D09E	4225	BNE	KGETC2
F73F	C985	4230	K3	CMP %%85
F741	D00A	4235	BNE	K6
F743	A988	4240	LDA	%%88
F745	854C	4245	K7	STA %4C
F747	8511	4250	STA	%11
F749	A99B	4255	GETOUT	LDA %%9B
F74B	D026	4260	BNE	K8
F74D	A57C	4265	K6	LDA %7C

F74F	C940	4270	CMP	##40
F751	B015	4275	BCS	K5
F753	ADFB02	4280	LDA	\$02FB
F756	C961	4285	CMP	##61
F758	900E	4290	BCC	K5
F75A	C97B	4295	CMP	##7B
F75C	B00A	4300	BCS	K5
F75E	ADBE02	4305	LDA	\$02BE
F761	F005	4310	BEQ	K5
F763	057C	4315	ORA	#7C
F765	4CFEF6	4320	JMP	KGETC3
F76B	2029F2	4325	K5 JSR	TSTCTL
F76B	F009	4330	BEQ	K4
F76D	ADFB02	4335	LDA	\$02FB
F770	4DB602	4340	EOR	\$02B6
F773	8DFB02	4345	K8 STA	\$02FB
F776	4C34F6	4350	K4 JMP	RETUR1
F779	A980	4355	ESCAPE	LDA ##80
F77B	8DA202	4360	STA	\$02A2
F77E	60	4365	RTS	
F77F	C654	4370	CRSRUP	DEC \$54
F781	1006	4375	BPL	COMRET
F783	AEBF02	4380	LDX	\$02BF
F786	CA	4385	DEX	
F787	8654	4390	UPDNM	STX \$54
F789	4C54FC	4395	COMRET	JMP STRBEG
F78C	E654	4400	CRSRDN	INC \$54
F78E	A554	4405	LDA	\$54
F790	CDBF02	4410	CMP	\$02BF
F793	90F4	4415	BCC	COMRET
F795	A200	4420	LDX	#0
F797	FOEE	4425	BEQ	UPDNM
F799	C655	4430	CRSRLF	DEC \$55
F79B	A555	4435	LDA	\$55
F79D	3004	4440	BMI	CRSRL1
F79F	C552	4445	CMP	\$52
F7A1	B004	4450	BCS	COMRE1
F7A3	A553	4455	CRSRL1	LDA \$53
F7A5	8555	4460	LFRTCM	STA \$55
F7A7	4CD5FB	4465	COMRE1	JMP DOLCOL
F7AA	E655	4470	CRSRRT	INC \$55
F7AC	A555	4475	LDA	\$55
F7AE	C553	4480	CMP	\$53
F7B0	90F5	4485	BCC	COMRE1
F7B2	F0F3	4490	BEQ	COMRE1
F7B4	A552	4495	LDA	\$52
F7B6	4CA5F7	4500	JMP	LFRTCM
F7B9	20D4FC	4505	CLRSCR	JSR PUTMSC
F7BC	A000	4510	LDY	#0
F7BE	9B	4515	TYA	
F7BF	9164	4520	CLRSC2	STA (\$64),Y
F7C1	CB	4525	INY	
F7C2	D0FB	4530	BNE	CLRSC2
F7C4	E665	4535	INC	\$65
F7C6	A665	4540	LDX	\$65
F7C8	E46A	4545	CPX	\$6A
F7CA	90F3	4550	BCC	CLRSC2
F7CC	A9FF	4555	LDA	##FF
F7CE	99B202	4560	CLRSC3	STA \$02B2,Y
F7D1	CB	4565	INY	
F7D2	C004	4570	CPY	#4

F7D4	90F8	4575	BCC CLRSC3
F7D6	20FEF0	4580	HOME JSR COLCR
F7D9	8563	4585	STA \$63
F7DB	856D	4590	STA \$6D
F7DD	A900	4595	LDA #0
F7DF	8554	4600	STA \$54
F7E1	8556	4605	STA \$56
F7E3	856C	4610	STA \$6C
F7E5	60	4615	RTS
F7E6	A563	4620	BS LDA \$63
F7E8	C552	4625	CMP \$52
F7EA	F021	4630	BEQ BS1
F7EC	A555	4635	BSA LDA \$55
F7EE	C552	4640	CMP \$52
F7F0	D003	4645	BNE BS3
F7F2	206BFC	4650	JSR DELTIM
F7F5	2099F7	4655	BS3 JSR CRSRLF
F7F8	A555	4660	LDA \$55
F7FA	C553	4665	CMP \$53
F7FC	D007	4670	BNE BS2
F7FE	A554	4675	LDA \$54
F800	F003	4680	BEQ BS2
F802	207FF7	4685	JSR CRSRUP
F805	A920	4690	BS2 LDA ##20
F807	8DFB02	4695	STA \$02FB
F80A	20E0F5	4700	JSR OUTPLT
F80D	4CD5FB	4705	BS1 JMP DOLCOL
F810	20AAF7	4710	TAB JSR CRSRRT
F813	A555	4715	LDA \$55
F815	C552	4720	CMP \$52
F817	D00A	4725	BNE TAB1
F819	2034FA	4730	JSR DOCR
F81C	2020FB	4735	JSR LOGGET
F81F	9002	4740	BCC TAB1
F821	B007	4745	BCS TAB2
F823	A563	4750	TAB1 LDA \$63
F825	2025FB	4755	JSR BITGET
F828	90E6	4760	BCC TAB
F82A	4CD5FB	4765	TAB2 JMP DOLCOL
F82D	A563	4770	SETTAB LDA \$63
F82F	4C06FB	4775	JMP BITSET
F832	A563	4780	CLRTAB LDA \$63
F834	4C12FB	4785	JMP BITCLR
F837	2085FC	4790	INSCHR JSR PHACRS
F83A	20A2F5	4795	JSR GETPLT
F83D	857D	4800	STA \$7D
F83F	A900	4805	LDA #0
F841	8DBB02	4810	STA \$02BB
F844	20FFF5	4815	INSCH4 JSR OUTCH2
F847	A563	4820	LDA \$63
F849	48	4825	PHA
F84A	20DCF9	4830	JSR INCRSA
F84D	68	4835	FLA
F84E	C563	4840	CMP \$63
F850	B00C	4845	BCS INSCH3
F852	A57D	4850	INSCH1 LDA \$7D
F854	48	4855	PHA
F855	20A2F5	4860	JSR GETPLT
F858	857D	4865	STA \$7D
F85A	68	4870	FLA
F85B	4C44F8	4875	JMP INSCH4

F85E	2090FC	4880	INSCH3 JSR PLACRS
F861	CEBB02	4885	INSCH6 DEC #02BB
F864	3004	4890	BMI INSCH5
F866	C654	4895	DEC #54
F868	DOF7	4900	BNE INSCH6
F86A	4CD5FB	4905	INSCH5 JMP DOLCOL
F86D	2085FC	4910	DELCHR JSR PHACRS
F870	2047F9	4915	DELCH1 JSR CONVRT
F873	A564	4920	LDA #64
F875	8568	4925	STA #68
F877	A565	4930	LDA #65
F879	8569	4935	STA #69
F87B	A563	4940	LDA #63
F87D	48	4945	PHA
F87E	20D4F9	4950	JSR INCRSB
F881	68	4955	PLA
F882	C563	4960	CMP #63
F884	B010	4965	BCS DELCH2
F886	A554	4970	LDA #54
F888	CDBF02	4975	CMP #02BF
F88E	B009	4980	BCS DELCH2
F88D	20A2F5	4985	JSR GETPLT
F890	A000	4990	LDY #0
F892	9168	4995	STA (#68),Y
F894	F0DA	5000	BEG DELCH1
F896	A000	5005	DELCH2 LDY #0
F898	98	5010	TYA
F899	9168	5015	STA (#68),Y
F89B	2060FC	5020	JSR DELT1A
F89E	2090FC	5025	JSR PLACRS
F8A1	4CD5FB	5030	JMP DOLCOL
F8A4	38	5035	INSLIN SEC
F8A5	207BFB	5040	INSLIA JSR EXTEND
F8A8	A552	5045	LDA #52
F8AA	8555	5050	STA #55
F8AC	2047F9	5055	JSR CONVRT
F8AF	A564	5060	LDA #64
F8B1	8568	5065	STA #68
F8B3	18	5070	CLC
F8B4	6928	5075	ADC #40
F8B6	8566	5080	STA #66
F8B8	A565	5085	LDA #65
F8BA	8569	5090	STA #69
F8BC	6900	5095	ADC #0
F8BE	8567	5100	STA #67
F8C0	A654	5105	LDX #54
F8C2	E017	5110	CPX #23
F8C4	F008	5115	BEG INSLI2
F8C6	204EFB	5120	INSLI1 JSR MOVLIN
F8C9	E8	5125	INX
F8CA	E017	5130	CPX #23
F8CC	DOF8	5135	BNE INSLI1
F8CE	209BFB	5140	INSLI2 JSR CLRLIN
F8D1	4CD5FB	5145	JMP DOLCOL
F8D4	20D5FB	5150	DELLIN JSR DOLCOL
F8D7	A451	5155	DELLIA LDY #51
F8D9	8454	5160	STY #54
F8DB	A454	5165	DELLIB LDY #54
F8DD	98	5170	DELLI1 TYA
F8DE	38	5175	SEC
F8DF	2023FB	5180	JSR L02GET

F8E2	08	5185	PHP
F8E3	98	5190	TYA
F8E4	18	5195	CLC
F8E5	6978	5200	ADC #120
F8E7	28	5205	FLP
F8E8	2004FB	5210	JSR BITPUT
F8EB	08	5215	INY
F8EC	C018	5220	CPY #24
F8EE	DOED	5225	BNE DELLI1
F8F0	ADB402	5230	LDA #02B4
F8F3	0901	5235	ORA #1
F8F5	8DB402	5240	STA #02B4
F8F8	A552	5245	DELLI2 LDA #52
F8FA	8555	5250	STA #55
F8FC	2047F9	5255	JSR CONVRT
F8FF	20B2FB	5260	JSR SCROL1
F902	2020FB	5265	JSR LOGGET
F905	90D4	5270	BCC DELLIB
F907	4CD5FB	5275	JMP DOLCOL
F90A	A020	5280	BELL LDY ##20
F90C	20F2F0	5285	BELL1 JSR CLICK
F90F	88	5290	DEY
F910	10FA	5295	BPL BELL1
F912	60	5300	RTS
F913	A902	5305	DBDDEC LDA #2
F915	D00A	5310	BNE DBSUB
F917	A44C	5315	STORE LDY #4C
F919	302B	5320	BMI STROK
F91B	A000	5325	LDY #0
F91D	9164	5330	STORE1 STA (#64),Y
F91F	A901	5335	DBDEC LDA #1
F921	8D9E02	5340	DBSUB STA #029E
F924	A54C	5345	LDA #4C
F926	301E	5350	BMI STROK
F928	A564	5355	LDA #64
F92A	38	5360	SEC
F92B	ED9E02	5365	SBC #029E
F92E	8564	5370	STA #64
F930	B002	5375	BCS DBSUB1
F932	C665	5380	DEC #65
F934	A50F	5385	DBSUB1 LDA #0F
F936	C565	5390	CMP #65
F938	900C	5395	BCC STROK
F93A	D006	5400	BNE STRERR
F93C	A50E	5405	LDA #0E
F93E	C564	5410	CMP #64
F940	9004	5415	BCC STROK
F942	A993	5420	STRERR LDA ##93
F944	854C	5425	STA #4C
F946	60	5430	STROK RTS
F947	A554	5435	CONVRT LDA #54
F949	48	5440	PHA
F94A	A555	5445	LDA #55
F94C	48	5450	PHA
F94D	A556	5455	LDA #56
F94F	48	5460	PHA
F950	20D4FC	5465	JSR PUTMSC
F953	A554	5470	LDA #54
F955	8566	5475	STA #66
F957	A900	5480	LDA #0
F959	8567	5485	STA #67

F95B	A566	5490	LDA \$66
F95D	0A	5495	ASL A
F95E	2667	5500	ROL \$67
F960	8551	5505	STA \$51
F962	A467	5510	LDY \$67
F964	8C9F02	5515	STY \$029F
F967	0A	5520	ASL A
F968	2667	5525	ROL \$67
F96A	0A	5530	ASL A
F96B	2667	5535	ROL \$67
F96D	18	5540	CLC
F96E	6551	5545	ADC \$51
F970	8566	5550	STA \$66
F972	A567	5555	LDA \$67
F974	6D9F02	5560	ADC \$029F
F977	8567	5565	STA \$67
F979	A657	5570	LDX \$57
F97B	BC75FE	5575	LDY DHLINE, X
F97E	88	5580	CONVR1 DEY
F97F	3007	5585	BMI CONVR2
F981	0666	5590	ASL \$66
F983	2667	5595	ROL \$67
F985	4C7EF9	5600	JMP CONVR1
F988	BCA5FE	5605	CONVR2 LDY DIV2TB, X
F98B	A555	5610	LDA \$55
F98D	A207	5615	LDX #7
F98F	88	5620	CONVR3 DEY
F990	300A	5625	BMI CONVR4
F992	0A	5630	DEX
F993	4656	5635	LSR \$56
F995	6A	5640	ROR A
F996	6EA102	5645	ROR \$02A1
F999	4C8FF9	5650	JMP CONVR3
F99C	08	5655	CONVR4 INY
F99D	18	5660	CLC
F99E	6566	5665	ADC \$66
F9A0	8566	5670	STA \$66
F9A2	9002	5675	BCC CONVR5
F9A4	E667	5680	INC \$67
F9A6	38	5685	CONVR5 SEC
F9A7	6EA102	5690	CONVR6 ROR \$02A1
F9AA	18	5695	CLC
F9AB	CA	5700	DEX
F9AC	10F9	5705	BPL CONVR6
F9AE	AEA102	5710	LDX \$02A1
F9B1	A566	5715	LDA \$66
F9B3	18	5720	CLC
F9B4	6564	5725	ADC \$64
F9B6	8564	5730	STA \$64
F9BB	855E	5735	STA \$5E
F9BA	A567	5740	LDA \$67
F9BC	6565	5745	ADC \$65
F9BE	8565	5750	STA \$65
F9C0	855F	5755	STA \$5F
F9C2	BDB5FE	5760	LDA DMASKT, X
F9C5	8DA002	5765	STA \$02A0
F9C8	856F	5770	STA \$6F
F9CA	68	5775	PLA
F9CB	8556	5780	STA \$56
F9CD	68	5785	PLA
F9CE	8555	5790	STA \$55

F9D0	68	5795	PLA
F9D1	8554	5800	STA \$54
F9D3	60	5805	RTS
F9D4	A900	5810	INCRSB LDA #0
F9D6	F002	5815	BEQ INCRSC
F9D8	A99B	5820	INCRSR LDA ##9B
F9DA	857D	5825	INCRSC STA \$7D
F9DC	E663	5830	INCRSA INC \$63
F9DE	E655	5835	INC \$55
F9E0	D002	5840	BNE INCSR2
F9E2	E656	5845	INC \$56
F9E4	A555	5850	INCSR2 LDA \$55
F9E6	A657	5855	LDX \$57
F9E8	DD85FE	5860	CMF COLUMN, X
F9EB	FO0B	5865	BEQ INC2A
F9ED	E000	5870	CPX #0
F9EF	D006	5875	BNE INCRS3
F9F1	C553	5880	CMF \$53
F9F3	F002	5885	BEQ INCRS3
F9F5	B001	5890	BCS INC2A
F9F7	60	5895	INCRS3 RTS
F9F8	E008	5900	INC2A CPX #8
F9FA	9004	5905	BCC DOCR1
F9FC	A556	5910	LDA \$56
F9FE	F0F7	5915	BEQ INCRS3
FA00	A557	5920	DOCR1 LDA \$57
FA02	D030	5925	BNE DOCR
FA04	A563	5930	LDA \$63
FA06	C951	5935	CMF #81
FA08	900A	5940	BCC DOCR1B
FA0A	A57D	5945	LDA \$7D
FA0C	F026	5950	BEQ DOCR
FA0E	2030FA	5955	JSR DOCRWS
FA11	4C77FA	5960	JMP INCRS1
FA14	2034FA	5965	DOCR1B JSR DOCR
FA17	A554	5970	LDA \$54
FA19	18	5975	CLC
FA1A	6978	5980	ADC #120
FA1C	2025FB	5985	JSR BITGET
FA1F	9008	5990	BCC DOCR1A
FA21	A57D	5995	LDA \$7D
FA23	F004	6000	BEQ DOCR1A
FA25	18	6005	CLC
FA26	20A5FB	6010	JSR INSLIA
FA29	4CD5FB	6015	DOCR1A JMP DOLCOL
FA2C	A900	6020	NOSCR1 LDA #0
FA2E	F002	6025	BEQ NOSCR1
FA30	A99B	6030	DOCRWS LDA ##9B
FA32	857D	6035	NOSCR1 STA \$7D
FA34	20FEFO	6040	DOCR JSR COLCR
FA37	A900	6045	LDA #0
FA39	8556	6050	STA \$56
FA3B	E654	6055	INC \$54
FA3D	A657	6060	DOCR2 LDX \$57
FA3F	A018	6065	LDY #24
FA41	247B	6070	BIT \$7B
FA43	1005	6075	BPL DOCR2A
FA45	A004	6080	LDY #4
FA47	98	6085	TYA
FA48	D003	6090	BNE DOCR2B
FA4A	BD95FE	6095	DOCR2A LDA NOROWS, X

FA4D	C554	6100	DOCR2B	CMF	\$54
FA4F	D026	6105		BNE	INCRS1
FA51	8C9D02	6110		STY	\$029D
FA54	BA	6115		TXA	
FA55	D020	6120		BNE	INCRS1
FA57	A57D	6125		LDA	\$7D
FA59	F01C	6130		BEQ	INCRS1
FA5B	C99B	6135		CMF	##9B
FA5D	38	6140		SEC	
FA5E	F001	6145		BEQ	DOCR4B
FA60	18	6150		CLC	
FA61	20ACFB	6155	DOCR4B	JSR	SCROLL
FA64	EEBB02	6160		INC	\$02BB
FA67	C66C	6165		DEC	#6C
FA69	CE9D02	6170		DEC	\$029D
FA6C	ADB202	6175		LDA	\$02B2
FA6F	38	6180		SEC	
FA70	10EF	6185		BPL	DOCR4B
FA72	AD9D02	6190		LDA	\$029D
FA75	8554	6195		STA	\$54
FA77	4CD5FB	6200	INCRS1	JMP	DOLCOL
FA7A	38	6205		SUBEND	SEC
FA7B	B570	6210		LDA	\$70, X
FA7D	E574	6215		SBC	\$74
FA7F	9570	6220		STA	\$70, X
FAB1	B571	6225		LDA	\$71, X
FAB3	E575	6230		SBC	\$75
FAB5	9571	6235		STA	\$71, X
FAB7	60	6240		RTS	
FABB	ADBF02	6245	ERANGE	LDA	\$02BF
FAB8	C904	6250		CMF	#4
FABD	F007	6255		BEQ	RANGE
FABF	A557	6260		LDA	\$57
FA91	F003	6265		BEQ	RANGE
FA93	20E8F3	6270		JSR	EOPEN
FA96	A927	6275	RANGE	LDA	#39
FA98	C553	6280		CMF	\$53
FA9A	B002	6285		BCS	RANGE3
FA9C	8553	6290		STA	\$53
FA9E	A657	6295	RANGE3	LDX	\$57
FAA0	BD95FE	6300		LDA	NOROWS, X
FAA3	C554	6305		CMF	\$54
FAA5	902A	6310		BCC	RNGERR
FAA7	F02B	6315		BEQ	RNGERR
FAA9	E008	6320		CPX	#8
FAAB	D00A	6325		BNE	RANGE1
FAAD	A556	6330		LDA	\$56
FAAF	F013	6335		BEQ	RNGOK
FAB1	C901	6340		CMF	#1
FAB3	D01C	6345		BNE	RNGERR
FAB5	F004	6350		BEQ	RANGE2
FAB7	A556	6355	RANGE1	LDA	\$56
FAB9	D016	6360		BNE	RNGERR
FABB	BD85FE	6365	RANGE2	LDA	COLUMN, X
FABE	C555	6370		CMF	\$55
FAC0	900F	6375		BCC	RNGERR
FAC2	F00D	6380		BEQ	RNGERR
FAC4	A901	6385	RNGOK	LDA	#1
FAC6	854C	6390		STA	\$4C
FAC8	A980	6395		LDA	##80
FACA	A611	6400		LDX	\$11

FACC 8511	6405	STA \$11
FACE F006	6410	BEQ RINGER2
FAD0 60	6415	RTS
FAD1 20D6F7	6420	RNGERR JSR HOME
FAD4 A98D	6425	LDA ##8D
FAD6 854C	6430	RNGER2 STA \$4C
FAD8 68	6435	RNGER1 PLA
FAD9 68	6440	PLA
FADA A57B	6445	LDA \$7B
FADC 1003	6450	BPL RETUR3
FADE 20A1FC	6455	JSR SWAPA
FAE1 4C34F6	6460	RETUR3 JMP RETUR1
FAE4 A000	6465	OFFCRS LDY #0
FAE6 A55D	6470	LDA \$5D
FAE8 915E	6475	STA (\$5E),Y
FAEA 60	6480	RTS
FAEB 48	6485	BITCON FHA
FAEC 2907	6490	AND #7
FAEE AA	6495	TAX
FAEF BDBDFE	6500	LDA MASKTB,X
FAF2 856E	6505	STA \$6E
FAF4 68	6510	PLA
FAF5 4A	6515	LSR A
FAF6 4A	6520	LSR A
FAF7 4A	6525	LSR A
FAF8 AA	6530	TAX
FAF9 60	6535	RTS
Fafa 2EB402	6540	BITROL ROL \$02B4
FAFD 2EB302	6545	ROL \$02B3
FB00 2EB202	6550	ROL \$02B2
FB03 60	6555	RTS
FB04 900C	6560	BITPUT BCC BITCLR
FB06 20EBFA	6565	BITSET JSR BITCON
FB09 BDA302	6570	LDA \$02A3,X
FB0C 056E	6575	ORA \$6E
FB0E 9DA302	6580	STA \$02A3,X
FB11 60	6585	RTS
FB12 20EBFA	6590	BITCLR JSR BITCON
FB15 A56E	6595	LDA \$6E
FB17 49FF	6600	EOR ##FF
FB19 3DA302	6605	AND \$02A3,X
FB1C 9DA302	6610	STA \$02A3,X
FB1F 60	6615	RTS
FB20 A554	6620	LOGGET LDA \$54
FB22 18	6625	L01GET CLC
FB23 6978	6630	L02GET ADC #120
FB25 20EBFA	6635	BITGET JSR BITCON
FB28 18	6640	CLC
FB29 BDA302	6645	LDA \$02A3,X
FB2C 256E	6650	AND \$6E
FB2E F001	6655	BEQ BITGE1
FB30 38	6660	SEC
FB31 60	6665	BITGE1 RTS
FB32 ADFA02	6670	INATAC LDA \$02FA
FB35 A457	6675	LDY \$57
FB37 C003	6680	CPY #3
FB39 B00F	6685	BCS INATA1
FB3B 2A	6690	ROL A
FB3C 2A	6695	ROL A
FB3D 2A	6700	ROL A
FB3E 2A	6705	ROL A

FB3F	2903	6710	AND #3
FB41	AA	6715	TAX
FB42	ADFA02	6720	LDA #02FA
FB45	299F	6725	AND ##9F
FB47	1DF4FF	6730	ORA INTATA,X
FB4A	8DFB02	6735	INATA1 STA #02FB
FB4D	60	6740	RTS
FB4E	A902	6745	MOVLIN LDA #2
FB50	8565	6750	STA #65
FB52	A947	6755	LDA ##47
FB54	8564	6760	STA #64
FB56	A027	6765	LDY #39
FB58	B166	6770	MOVLI1 LDA (#66),Y
FB5A	8550	6775	STA #50
FB5C	B168	6780	LDA (#68),Y
FB5E	9166	6785	STA (#66),Y
FB60	A550	6790	LDA #50
FB62	9164	6795	STA (#64),Y
FB64	88	6800	DEY
FB65	10F1	6805	BPL MOVLI1
FB67	A565	6810	LDA #65
FB69	8569	6815	STA #69
FB6B	A564	6820	LDA #64
FB6D	8568	6825	STA #68
FB6F	18	6830	CLC
FB70	A566	6835	LDA #66
FB72	6928	6840	ADC #40
FB74	8566	6845	STA #66
FB76	9002	6850	BCC MOVLI2
FB78	E667	6855	INC #67
FB7A	60	6860	MOVLI2 RTS
FB7B	08	6865	EXTEND PHP
FB7C	A017	6870	LDY #23
FB7E	98	6875	EXTEN1 TYA
FB7F	2022FB	6880	JSR L01GET
FB82	08	6885	PHP
FB83	98	6890	TYA
FB84	18	6895	CLC
FB85	6979	6900	ADC #121
FB87	28	6905	PLP
FB88	2004FB	6910	JSR BITPUT
FB8B	88	6915	EXTEN3 DEY
FB8C	3004	6920	BMI EXTEN4
FB8E	C454	6925	CPY #54
FB90	BOEC	6930	BCS EXTEN1
FB92	A554	6935	EXTEN4 LDA #54
FB94	18	6940	CLC
FB95	6978	6945	ADC #120
FB97	28	6950	PLP
FB98	4C04FB	6955	JMP BITPUT
FB9B	A552	6960	CLRLIN LDA #52
FB9D	8555	6965	STA #55
FB9F	2047F9	6970	JSR CONVRT
FBA2	A027	6975	LDY #39
FBA4	A900	6980	LDA #0
FBA6	9164	6985	CLRLI1 STA (#64),Y
FBA8	88	6990	DEY
FBA9	10FB	6995	BPL CLRLI1
FBAE	60	7000	RTS
FBAC	20FAFA	7005	SCROLL JSR BITROL
FBAF	20D4FC	7010	JSR PUTMSC

FBB2	A028	7015	SCR0L1 LDY #40
FBB4	B164	7020	LDA (\$64),Y
FBB6	A66A	7025	LDX \$6A
FBB8	CA	7030	DEX
FBB9	E465	7035	CPX \$65
FBBB	D008	7040	BNE SCR0L2
FBBD	A2D7	7045	LDX #\$D7
FBBF	E464	7050	CPX \$64
FBC1	B002	7055	BCS SCR0L2
FBC3	A900	7060	LDA #0
FBC5	A000	7065	SCR0L2 LDY #0
FBC7	9164	7070	STA (\$64),Y
FBC9	E664	7075	INC \$64
FBCB	D0E5	7080	BNE SCR0L1
FBCD	E665	7085	INC \$65
FBCF	A565	7090	LDA \$65
FBD1	C56A	7095	CMP \$6A
FBD3	D0DD	7100	BNE SCR0L1
FBD5	A900	7105	DOLC0L LDA #0
FBD7	8563	7110	STA \$63
FBD9	A554	7115	LDA \$54
FBD8	8551	7120	STA \$51
FBD8	A551	7125	DOLC01 LDA \$51
FBD8	2022FB	7130	JSR L01GET
FBE2	B00C	7135	BCS DOLC02
FBE4	A563	7140	LDA \$63
FBE6	18	7145	CLC
FBE7	6928	7150	ADC #40
FBE9	8563	7155	STA \$63
FBE8	C651	7160	DEC \$51
FBE8	4CDDFB	7165	JMP DOLC01
FBF0	18	7170	DOLC02 CLC
FBF1	A563	7175	LDA \$63
FBF3	6555	7180	ADC \$55
FBF5	8563	7185	STA \$63
FBF7	60	7190	RTS
FBF8	2085FC	7195	DOBUFC JSR PHACRS
FBF8	A563	7200	LDA \$63
Fbfd	48	7205	PHA
Fbfe	A56C	7210	LDA \$6C
FC00	8554	7215	STA \$54
FC02	A56D	7220	LDA \$6D
FC04	8555	7225	STA \$55
FC06	A901	7230	LDA #1
FC08	856B	7235	STA \$6B
FC0A	A217	7240	DOBUF1 LDX #23
FC0C	A57B	7245	LDA \$7B
FC0E	1002	7250	BPL DOB1
FC10	A203	7255	LDX #3
FC12	E454	7260	DOB1 CPX \$54
FC14	D00B	7265	BNE DOBU1A
FC16	A555	7270	LDA \$55
FC18	C553	7275	CMP \$53
FC1A	D005	7280	BNE DOBU1A
FC1C	E66B	7285	INC \$6B
FC1E	4C31FC	7290	JMP DOBUF2
FC21	20D4F9	7295	DOBU1A JSR INCRSB
FC24	E66B	7300	INC \$6B
FC26	A563	7305	LDA \$63
FC28	C552	7310	CMP \$52
FC2A	D0DE	7315	BNE DOBUF1

FC2C	C654	7320	DEC #54
FC2E	2099F7	7325	JSR CRSRLF
FC31	20A2F5	7330	DOBUF2 JSR GETPLT
FC34	D017	7335	BNE DOBUF4
FC36	C66B	7340	DEC #6B
FC38	A563	7345	LDA #63
FC3A	C552	7350	CMP #52
FC3C	F00F	7355	BEG DOBUF4
FC3E	2099F7	7360	JSR CRSRLF
FC41	A555	7365	LDA #55
FC43	C553	7370	CMP #53
FC45	D002	7375	BNE DOBUF3
FC47	C654	7380	DEC #54
FC49	A56B	7385	DOBUF3 LDA #6B
FC4B	DOE4	7390	BNE DOBUF2
FC4D	6B	7395	DOBUF4 PLA
FC4E	8563	7400	STA #63
FC50	2090FC	7405	JSR PLACRS
FC53	60	7410	RTS
FC54	20D5FB	7415	STRBEG JSR DOLCOL
FC57	A551	7420	LDA #51
FC59	856C	7425	STA #6C
FC5B	A552	7430	LDA #52
FC5D	856D	7435	STA #6D
FC5F	60	7440	RTS
FC60	A563	7445	DELTIA LDA #63
FC62	C552	7450	CMP #52
FC64	D002	7455	BNE DELTIB
FC66	C654	7460	DEC #54
FC68	20D5FB	7465	DELTIB JSR DOLCOL
FC6B	A563	7470	DELTIM LDA #63
FC6D	C552	7475	CMP #52
FC6F	F013	7480	BEG DELTI3
FC71	2047F9	7485	JSR CONVRT
FC74	A553	7490	LDA #53
FC76	38	7495	SEC
FC77	E552	7500	SBC #52
FC79	AB	7505	TAY
FC7A	B164	7510	DELT11 LDA (#64),Y
FC7C	D006	7515	BNE DELTI3
FC7E	88	7520	DEY
FC7F	10F9	7525	BPL DELTI1
FC81	4CDBF8	7530	DELT12 JMP DELLIB
FC84	60	7535	DELT13 RTS
FC85	A202	7540	PHACRS LDX #2
FC87	B554	7545	PHACR1 LDA #54,X
FC89	9DB802	7550	STA #02B8,X
FC8C	CA	7555	DEX
FC8D	10F8	7560	BPL PHACR1
FC8F	60	7565	RTS
FC90	A202	7570	PLACRS LDX #2
FC92	BDB802	7575	PLACR1 LDA #02B8,X
FC95	9554	7580	STA #54,X
FC97	CA	7585	DEX
FC98	10F8	7590	BPL PLACR1
FC9A	60	7595	RTS
FC9B	20A1FC	7600	SWAP JSR SWAPA
FC9E	4C34F6	7605	JMP RETUR1
FCA1	ADBFO2	7610	SWAPA LDA #02BF
FCA4	C918	7615	CMP #24
FCA6	F017	7620	BEG SWAP3

FCA8	A20B	7625	LDX #11
FCAA	B554	7630	SWAP1 LDA \$54, X
FCAC	4B	7635	PHA
FCAD	BD9002	7640	LDA \$0290, X
FCB0	9554	7645	STA \$54, X
FCB2	6B	7650	PLA
FCB3	9D9002	7655	STA \$0290, X
FCB6	CA	7660	DEX
FCB7	10F1	7665	BPL SWAP1
FCB9	A57B	7670	LDA \$7B
FCBB	49FF	7675	EOR ##FF
FCBD	857B	7680	STA \$7B
FCBF	60	7685	SWAP3 RTS
FCC0	A54B	7690	GETSEC LDA \$4B
FCC2	F003	7695	BEQ DISKM
FCC4	4C7AE4	7700	JMP \$E47A
FCC7	A952	7705	DISKM LDA ##52
FCC9	8D0203	7710	STA \$0302
FCCC	A901	7715	LDA #1
FCCF	8D0103	7720	STA \$0301
FCD1	4C53E4	7725	JMP \$E453
FCD4	A558	7730	PUTMSC LDA \$58
FCD6	8564	7735	STA \$64
FCD8	A559	7740	LDA \$59
FCD8	8565	7745	STA \$65
FCD8	60	7750	RTS
FCDD	A200	7755	DRAW LDX #0
FCDF	A522	7760	LDA \$22
FCE1	C911	7765	CMF ##11
FCE3	F008	7770	BEQ DRAWA
FCE5	C912	7775	CMF ##12
FCE7	F003	7780	BEQ DRAWB
FCE9	A084	7785	LDY ##84
FCEB	60	7790	RTS
FCEC	E8	7795	DRAWB INX
FCED	8EB702	7800	DRAWA STX \$02B7
FCF0	A554	7805	LDA \$54
FCF2	8560	7810	STA \$60
FCF4	A555	7815	LDA \$55
FCF6	8561	7820	STA \$61
FCF8	A556	7825	LDA \$56
FCFA	8562	7830	STA \$62
FCFC	A901	7835	LDA #1
FCFE	8579	7840	STA \$79
FD00	857A	7845	STA \$7A
FD02	3B	7850	SEC
FD03	A560	7855	LDA \$60
FD05	E55A	7860	SBC \$5A
FD07	8576	7865	STA \$76
FD09	B00D	7870	BCS DRAW1
FD0B	A9FF	7875	LDA ##FF
FD0D	8579	7880	STA \$79
FD0F	A576	7885	LDA \$76
FD11	49FF	7890	EOR ##FF
FD13	1B	7895	CLC
FD14	6901	7900	ADC #1
FD16	8576	7905	STA \$76
FD18	3B	7910	DRAW1 SEC
FD19	A561	7915	LDA \$61
FD1B	E55B	7920	SBC \$5B
FD1D	8577	7925	STA \$77

FD1F	A562	7930	LDA \$62
FD21	E55C	7935	SBC \$5C
FD23	8578	7940	STA \$78
FD25	B016	7945	BCS DRAW2
FD27	A9FF	7950	LDA ##FF
FD29	857A	7955	STA \$7A
FD2B	A577	7960	LDA \$77
FD2D	49FF	7965	EOR ##FF
FD2F	8577	7970	STA \$77
FD31	A578	7975	LDA \$78
FD33	49FF	7980	EOR ##FF
FD35	8578	7985	STA \$78
FD37	E677	7990	INC \$77
FD39	D002	7995	BNE DRAW2
FD3B	E678	8000	INC \$78
FD3D	A202	8005	DRAW2 LDX #2
FD3F	A000	8010	LDY #0
FD41	8473	8015	STY \$73
FD43	98	8020	DRAW3A TYA
FD44	9570	8025	STA \$70, X
FD46	B55A	8030	LDA \$5A, X
FD48	9554	8035	STA \$54, X
FD4A	CA	8040	DEX
FD4B	10F6	8045	BPL DRAW3A
FD4D	A577	8050	LDA \$77
FD4F	EB	8055	INX
FD50	A8	8060	TAY
FD51	A578	8065	LDA \$78
FD53	857F	8070	STA \$7F
FD55	8575	8075	STA \$75
FD57	D00A	8080	BNE DRAW3
FD59	A577	8085	LDA \$77
FD5B	C576	8090	CMP \$76
FD5D	B004	8095	BCS DRAW3
FD5F	A476	8100	LDY \$76
FD61	A202	8105	LDX #2
FD63	98	8110	DRAW3 TYA
FD64	857E	8115	STA \$7E
FD66	8574	8120	STA \$74
FD68	48	8125	PHA
FD69	A575	8130	LDA \$75
FD6B	4A	8135	LSR A
FD6C	68	8140	PLA
FD6D	6A	8145	ROR A
FD6E	9570	8150	STA \$70, X
FD70	A57E	8155	DRAW4A LDA \$7E
FD72	057F	8160	ORA \$7F
FD74	D003	8165	BNE DRAW11
FD76	4C22FE	8170	JMP DRAW10
FD79	18	8175	DRAW11 CLC
FD7A	A570	8180	LDA \$70
FD7C	6576	8185	ADC \$76
FD7E	8570	8190	STA \$70
FD80	9002	8195	BCC DRAW5
FD82	E671	8200	INC \$71
FD84	A571	8205	DRAW5 LDA \$71
FD86	C575	8210	CMP \$75
FD88	9014	8215	BCC DRAW6
FD8A	D006	8220	BNE DRAW5A
FD8C	A570	8225	LDA \$70
FD8E	C574	8230	CMP \$74

FD90	900C	8235	BCC DRAW6
FD92	18	8240	DRAW5A CLC
FD93	A554	8245	LDA \$54
FD95	6579	8250	ADC \$79
FD97	8554	8255	STA \$54
FD99	A200	8260	LDX #0
FD9B	207AFA	8265	JSR SUBEND
FD9E	18	8270	DRAW6 CLC
FD9F	A572	8275	LDA \$72
FDA1	6577	8280	ADC \$77
FDA3	8572	8285	STA \$72
FDA5	A573	8290	LDA \$73
FDA7	6578	8295	ADC \$78
FDA9	8573	8300	STA \$73
FDAB	C575	8305	CMP \$75
FDAD	9027	8310	BCC DRAW8
FAAF	D006	8315	BNE DRAW6A
FDB1	A572	8320	LDA \$72
FDB3	C574	8325	CMP \$74
FDB5	901F	8330	BCC DRAW8
FDB7	247A	8335	DRAW6A BIT \$7A
FDB9	1010	8340	BPL DRAW6B
FDDB	C655	8345	DEC \$55
FDBD	A555	8350	LDA \$55
FDBF	C9FF	8355	CMP #\$FF
FDC1	D00E	8360	BNE DRAW7
FDC3	A556	8365	LDA \$56
FDC5	F00A	8370	BEQ DRAW7
FDC7	C656	8375	DEC \$56
FDC9	1006	8380	BPL DRAW7
FDCB	E655	8385	DRAW6B INC \$55
FDCD	D002	8390	BNE DRAW7
FDCF	E656	8395	INC \$56
FDD1	A202	8400	DRAW7 LDX #2
FDD3	207AFA	8405	JSR SUBEND
FDD6	2096FA	8410	DRAW8 JSR RANGE
FDD9	20E0F5	8415	JSR OUTPLT
FDDC	ADB702	8420	LDA \$02B7
FDDF	F02F	8425	BEQ DRAW9
FDE1	2085FC	8430	JSR PHACRS
FDE4	ADFB02	8435	LDA \$02FB
FDE7	8DBC02	8440	STA \$02BC
FDEA	A554	8445	DRAW8A LDA \$54
FDEC	48	8450	PHA
FDED	20DCF9	8455	JSR INCRSA
FDF0	68	8460	PLA
FDF1	8554	8465	STA \$54
FDF3	2096FA	8470	DRAW8C JSR RANGE
FDF6	20A2F5	8475	JSR GETPLT
FDF9	D00C	8480	BNE DRAW8B
FDFB	ADFD02	8485	LDA \$02FD
FDFF	8DFB02	8490	STA \$02FB
FE01	20E0F5	8495	JSR OUTPLT
FE04	4CEAFD	8500	JMP DRAW8A
FE07	ADBC02	8505	DRAW8B LDA \$02BC
FE0A	8DFB02	8510	STA \$02FB
FE0D	2090FC	8515	JSR PLACRS
FE10	38	8520	DRAW9 SEC
FE11	A57E	8525	LDA \$7E
FE13	E901	8530	SBC #1
FE15	857E	8535	STA \$7E

FE17	A57F	8540	LDA \$7F
FE19	E900	8545	SBC #0
FE1B	857F	8550	STA \$7F
FE1D	3003	8555	BMI DRAW10
FE1F	4C70FD	8560	JMP DRAW4A
FE22	4C34F6	8565	DRAW10 JMP RETUR1
FE25	18100A0A	8570	ALOCAT .BYTE 24,16,10,10,16,28,52,100,196,196,196,196
FE29	101C3464		
FE2D	C4C4C4C4		
FE31	1C1064C4	8575	.BYTE 28,16,100,196
FE35	17170B17	8580	NUMDLE .BYTE 23,23,11,23,47,47,95,95,97,97,97,97
FE39	2F2F5F5F		
FE3D	61616161		
FE41	170BBF61	8585	.BYTE 23,11,191,97
FE45	13130913	8590	MXDMDE .BYTE 19,19,9,19,39,39,79,79,65,65,65,65
FE49	27274F4F		
FE4D	41414141		
FE51	13099F41	8595	.BYTE 19,9,159,65
FE55	02060708	8600	ANCONV .BYTE 2,6,7,8,9,10,11,13,15,15,15,15
FE59	090A0B0D		
FE5D	0F0F0F0F		
FE61	04050C0E	8605	.BYTE 4,5,12,14
FE65	00000000	8610	PAGETB .BYTE 0,0,0,0,0,0,0,1,1,1,1,1
FE69	00000001		
FE6D	01010101		
FE71	00000101	8615	.BYTE 0,0,1,1
FE75	02010100	8620	DHLINE .BYTE 2,1,1,0,0,1,1,2,2,2,2,2
FE79	00010102		
FE7D	02020202		
FE81	02020102	8625	.BYTE 2,2,1,2
FE85	28141428	8630	COLUMN .BYTE 40,20,20,40,80,80,160,160,64,80,80,80
FE89	5050A0A0		
FE8D	40505050		
FE91	2828A0A0	8635	.BYTE 40,40,160,160
FE95	18180C18	8640	NOROWS .BYTE 24,24,12,24,48,48,96,96,192,192,192,192
FE99	30306060		
FE9D	C0C0C0C0		
FEA1	180CC0C0	8645	.BYTE 24,12,192,192
FEA5	00000002	8650	DIV2TB .BYTE 0,0,0,2,3,2,3,2,3,1,1,1
FEA9	03020302		
FEAD	03010101		
FEB1	00000302	8655	.BYTE 0,0,3,2
FEB5	00FFF00F	8660	DMASKT .BYTE 0,\$FF,\$F0,\$0F,\$C0,\$30,\$0C,3
FEB9	C0300C03		
FEBD	80402010	8665	MASKTB .BYTE \$80,\$40,\$20,\$10,8,4,2,1,0,1,3,7
FEC1	08040201		
FEC5	00010307		
FEC9	28CAB246	8670	COLRTB .BYTE \$28,\$CA,\$B2,\$46,0
FECD	00		
FECE	1B	8675	CNTRLS .BYTE \$1B
FECF	79F7	8680	.WORD ESCAPE
FED1	1C	8685	.BYTE \$1C
FED2	7FF7	8690	.WORD CRSRLP
FED4	1D	8695	.BYTE \$1D
FED5	8CF7	8700	.WORD CRSRDN
FED7	1E	8705	.BYTE \$1E
FED8	99F7	8710	.WORD CRSRLF
FEDA	1F	8715	.BYTE \$1F
FEDB	AAF7	8720	.WORD CRSRRT
FEDD	7D	8725	.BYTE \$7D
FEDE	B9F7	8730	.WORD CLRSCR

FEE0	7E	8735	.BYTE	\$7E
FEE1	E6F7	8740	.WORD	BS
FEE3	7F	8745	.BYTE	\$7F
FEE4	10F8	8750	.WORD	TAB
FEE6	9B	8755	.BYTE	\$9B
FEE7	30FA	8760	.WORD	DOCRWS
FEE9	9C	8765	.BYTE	\$9C
FEEA	D4F8	8770	.WORD	DELLIN
FEED	9D	8775	.BYTE	\$9D
FEED	A4F8	8780	.WORD	INSLIN
FEED	9E	8785	.BYTE	\$9E
FEF0	32F8	8790	.WORD	CLRTAB
FEF2	9F	8795	.BYTE	\$9F
FEF3	2DF8	8800	.WORD	SETTAB
FEF5	FD	8805	.BYTE	\$FD
FEF6	0AF9	8810	.WORD	BELL
FEF8	FE	8815	.BYTE	\$FE
FEF9	6DF8	8820	.WORD	DELCHR
FEFB	FF	8825	.BYTE	\$FF
FEFC	37F8	8830	.WORD	INSTR
FEFE	6C6A3B80	8835	ATASCII	.BYTE \$6C,\$6A,\$3B,\$80,\$80,\$6B,\$2B,\$2A
FF02	806B2B2A			
FF06	6F807075	8840	.BYTE	\$6F,\$80,\$70,\$75,\$9B,\$69,\$2D,\$3D
FF0A	9B692D3D			
FF0E	76806380	8845	.BYTE	\$76,\$80,\$63,\$80,\$80,\$62,\$78,\$7A
FF12	80627B7A			
FF16	34803336	8850	.BYTE	\$34,\$80,\$33,\$36,\$1B,\$35,\$32,\$31
FF1A	1B353231			
FF1E	2C202E6E	8855	.BYTE	\$2C,\$20,\$2E,\$6E,\$80,\$6D,\$2F,\$81
FF22	806D2F81			
FF26	72806579	8860	.BYTE	\$72,\$80,\$65,\$79,\$7F,\$74,\$77,\$71
FF2A	7F747771			
FF2E	39803037	8865	.BYTE	\$39,\$80,\$30,\$37,\$7E,\$38,\$3C,\$3E
FF32	7E383C3E			
FF36	66686480	8870	.BYTE	\$66,\$68,\$64,\$80,\$82,\$67,\$73,\$61
FF3A	82677361			
FF3E	4C4A3A80	8875	.BYTE	\$4C,\$4A,\$3A,\$80,\$80,\$4B,\$5C,\$5E
FF42	804B5C5E			
FF46	4F805055	8880	.BYTE	\$4F,\$80,\$50,\$55,\$9B,\$49,\$5F,\$7C
FF4A	9B495F7C			
FF4E	56804380	8885	.BYTE	\$56,\$80,\$43,\$80,\$80,\$42,\$58,\$5A
FF52	8042585A			
FF56	24802326	8890	.BYTE	\$24,\$80,\$23,\$26,\$1B,\$25,\$22,\$21
FF5A	1B252221			
FF5E	5B205D4E	8895	.BYTE	\$5B,\$20,\$5D,\$4E,\$80,\$4D,\$3F,\$81
FF62	804D3F81			
FF66	52804559	8900	.BYTE	\$52,\$80,\$45,\$59,\$9F,\$54,\$57,\$51
FF6A	9F545751			
FF6E	28802927	8905	.BYTE	\$28,\$80,\$29,\$27,\$9C,\$40,\$7D,\$9D
FF72	9C407D9D			
FF76	46484480	8910	.BYTE	\$46,\$48,\$44,\$80,\$83,\$47,\$53,\$41
FF7A	83475341			
FF7E	0C0A7B80	8915	.BYTE	\$0C,\$0A,\$7B,\$80,\$80,\$0B,\$1E,\$1F
FF82	800B1E1F			
FF86	0F801015	8920	.BYTE	\$0F,\$80,\$10,\$15,\$9B,\$09,\$1C,\$1D
FF8A	9B091C1D			
FF8E	16800380	8925	.BYTE	\$16,\$80,\$03,\$80,\$80,\$02,\$18,\$1A
FF92	8002181A			
FF96	80808580	8930	.BYTE	\$80,\$80,\$85,\$80,\$1B,\$80,\$FD,\$80
FF9A	1B80FDB0			
FF9E	0020600E	8935	.BYTE	\$00,\$20,\$60,\$0E,\$80,\$0D,\$80,\$81

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FFA2 800D8081
FFA6 12800519 8940 .BYTE $12,$80,$05,$19,$9E,$14,$17,$11
FFAA 9E141711
FFAE 80808080 8945 .BYTE $80,$80,$80,$80,$FE,$80,$7D,$FF
FFB2 FEB07DFF
FFB6 06080480 8950 .BYTE $06,$08,$04,$80,$84,$07,$13,$01
FFBA 84071301
FFBE AD09D2 8955 PIRQ5 LDA $D209
FFC1 CDF202 8960 CMP $02F2
FFC4 D005 8965 BNE PIRQ3
FFC6 ADF102 8970 LDA $02F1
FFC9 D01E 8975 BNE PIRQ4
FFCB AD09D2 8980 PIRQ3 LDA $D209
FFCE C99F 8985 CMP #$9F
FFD0 D00A 8990 BNE PIRQ1
FFD2 ADFF02 8995 LDA $02FF
FFD5 49FF 9000 EOR #$FF
FFD7 8DFF02 9005 STA $02FF
FFDA B00D 9010 BCS PIRQ4
FFDC 8DFC02 9015 PIRQ1 STA $02FC
FFDF 8DF202 9020 STA $02F2
FFE2 A901 9025 LDA #1
FFE4 8DF102 9030 STA $02F1
FFE7 854D 9035 STA $4D
FFE9 A910 9040 PIRQ4 LDA #$10
FFEB 8D2B02 9045 STA $022B
FFEE 68 9050 PIRQ2 PLA
FFEF 40 9055 RTI
FFF0 40002060 9060 ATAINTE .BYTE $40,0,$20,$60
FFF4 20400060 9065 INTATA .BYTE $20,$40,0,$60
FFF8 F3E61CE9 9070 .BYTE $F3,$E6,$1C,$E9,$30,$E9,$F3,$E6
FFFC 30E9F3E6
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F30E ALLSEC	FE25 ALOCAT	FE55 ANCONV	F705 AS
CC01	FFFO ATAINT		
FEFE ATASCI	FOOB ATEOF	F306 BADDSK	F058 BE
EP	F05A BEEP1		
F90A BELL	F90C BELL1	FB12 BITCLR	FAEB BI
TC0N	FB31 BITGE1		
FB25 BITGET	FBO4 BITPUT	FAFA BITROL	FB06 BI
TSET	F223 BLACKB		
F36C BLOAD	F2CF BOOT	F7E6 BS	F80D BS
1	F805 BS2		
F7F5 BS3	F7EC BSA	F239 CAINI	F23C CB
INI	F3CD CINI		
FOF2 CLICK	FOF4 CLICK1	F02B CLOSEC	F27A CL
RCHF	FBA6 CLRLI1		
FB9B CLRLIN	F140 CLRRAM	F7BF CLRSC2	F7CE CL
RSC3	F7B9 CLRSCR		
F832 CLRTAB	F405 CLRTBS	F038 CLWRT	FECE CN
TRLS	FOFE COLCR		
F108 COLCR1	F10A COLCR2	FEC9 COLRTB	FE85 CO
LUMN	F7A7 COMRE1	F988 CONVR2	F98F CO
F789 COMRET	F97E CONVR1		
NVR3	F99C CONVR4	F947 CONVRT	F5E7 CR
F9A6 CONVR5	F9A7 CONVR6		
LOOP	F78C CRSRDN	F7AA CRSRRT	F77F CR
F7A3 CRSRL1	F799 CRSRLF		
SRUP	F39E CSBOOT	F913 DBDDEC	F91F DB
F3AC CSBOT2	FOAC CSIO		
DEC	F921 DBSUB	F896 DELCH2	F86D DE
F934 DBSUB1	F870 DELCH1		
LCHR	F8DD DELL I1	F8DB DELLIB	F8D4 DE
F8F8 DELL I2	F8D7 DELLIA		
LLIN	FC7A DELT I1	FC60 DELTIA	FC68 DE
FC81 DELT I2	FC84 DELT I3		
LTIB	FC6B DELTIM	=000D DERRL	FE75 DH
F10D DERR5	=00F1 DERRH		
LINE	F37E DINI	FEB5 DMASKT	FC12 DO
FCC7 DISKM	FEA5 DIV2TB		
B1	F2ED DOBOOT	FC31 DOBUF2	FC49 DO
FC21 DOBU1A	FC0A DOBUF1		
BUF3	FC4D DOBUF4	FA00 DOCR1	FA29 DO
FBF8 DOBUFC	FA34 DOCR		
CR1A	FA14 DOCR1B	FA4D DOCR2B	FA61 DO
FA3D DOCR2	FA4A DOCR2A		
CR4B	FA30 DOCRWS	FB05 DOLCOL	F3E2 DO
FBDD DOLC01	FBF0 DOLC02		
PEN	F44A DOPEN1	F51C DOPEN4	F524 DO
F4CB DOPEN2	F4F0 DOPEN3		
PEN5	F588 DOPEN7	F441 DOPENA	F6AD DU
F422 DOPEN8	F577 DOPEN9		
SS	FCDD DRAW	FD79 DRAW11	FD3D DR
FD18 DRAW1	FE22 DRAW10		
AW2	FD63 DRAW3	FD84 DRAW5	FD92 DR
FD43 DRAW3A	FD70 DRAW4A		
AW5A	FD9E DRAW6	FDD1 DRAW7	FDD6 DR
FDB7 DRAW6A	FDCB DRAW6B		
AW8	FDEA DRAW8A	FE10 DRAW9	FCED DR
FEO7 DRAW8B	FD33 DRAW8C		
AWA	FCEC DRAWB	F66E EGETC2	F67C EG
F381 DSKRDE	F650 EGETC1		
ETC3	F691 EGETC5	F63E EGETCH	F35A EN
F66B EGETC6	F680 EGETC7		
BOOT	F1BD ENDACK		

F1AC ENDBCK	F276 ENDRAM	F257 ENSPE2	F254 EN
SPEC	F3E8 EOPEN		
F6BE EOUTC5	F6B5 EOUTC6	F6A4 EOUTCH	FA88 ER
ANGE	F6BB ERETN		
F779 ESCAPE	F173 ESTSCM	FB7E EXTEN1	FB8B EX
TEN3	FB92 EXTEN4		
FB7B EXTEND	F032 FCAX	F593 GETCH	F749 GE
TOUT	F5A2 GETPLT		
FCC0 GETSEC	F277 HARDI	F7D6 HOME	F25F HO
WMCH	FB4A INATA1		
FB32 INATAC	F9F8 INC2A	FA77 INCRS1	F9F7 IN
CRS3	F9DC INCRSA		
F9D4 INCRSB	F9DA INCRSC	F9D8 INCRSR	F9E4 IN
CSR2	F852 INSCH1		
F85E INSCH3	F844 INSCH4	F86A INSCH5	F861 IN
SCH6	F837 INSCHR		
F8C6 INSL11	F8CE INSL12	F8A5 INSLIA	F8A4 IN
SLIN	FFF4 INTATA		
FOOD ISEOF	F6A1 JSRIND	F729 K1	F734 K2
	F73F K3		
F776 K4	F768 K5	F74D K6	F745 K7
	F773 K8		
F71E KGETC1	F6DD KGETC2	F6FE KGETC3	F6E2 K6
ETCH	F7A5 LFRTCM		
FB22 L01GET	FB23 L02GET	FB20 LOGGET	FE5D MA
SKTB	F506 MDE15		
F4BE MODE12	F46F MODE15	FB58 MOVL11	FB7A MO
VLI2	FB4E MOVLIN		
F17D MOVVEC	F32D MVBUFF	F32F MVNXB	FE45 MX
DMDE	F005 NLR		
F1F1 NOA1	F212 NOA2	F1F8 NOB1	F1FF NO
BOOT	F220 NOCAR2		
F1FC NOCART	F3AB NOCSB2	F3CC NOCSBT	F63D NO
FUNC	F2DC NOINIT		
F2CE NOKEY	F49D NOMOD	FE95 NOROWS	FA32 NO
SCR1	FA2C NOSCRL		
F47D NOT8	F4EB NOTMXD	F2DD NOWARM	FE35 NU
MDLE	F18C NXTENT		
FAE4 OFFCRS	F3F0 OPNCOM	F118 OPNETD	F43D OP
NERR	=00F1 OPNH		
=0018 OPNL	F17B OPSYS	F28A OSRAM	F5B7 OU
TCH	F5FF OUTCH2		
F5BD OUTCHA	F5D7 OUTCHB	F5CA OUTCHE	F5E0 OU
TPLT	FE65 PAGETB		
F010 PBYTE	FC87 PHACR1	FC85 PHACRS	FFDC P1
RQ1	FFEE PIRQ2		
FFCB PIRQ3	FFE9 PIRQ4	FFBE PIRQ5	FC92 PL
ACR1	FC90 PLACRS		
F385 PUTLIN	FCD4 PUTMSC	F3D0 PWRONA	F125 PW
RUP	F128 PWRUP1		
FA96 RANGE	FAB7 RANGE1	FABB RANGE2	FA9E RA
NGE3	F310 RDBYTE		
F11B RESET	F634 RETUR1	F621 RETUR2	FAE1 RE
TUR3	FAD8 RNGER1		
FAD6 RNGER2	FAD1 RNGERR	FAC4 RNGOK	F1DB SC
RNOK	FBB2 SCROL1		
FBC5 SCROL2	FBAC SCROLL	F301 SECT1	F34C SE
CTX	F82D SETTAB		
F5B1 SHIFT1	F610 SHIFT2	F5AA SHIFTD	F608 SH
IFTU	F095 SIOSB		

ORE1	FC54 STRBEG		
F942 STRERR	F946 STROK	FA7A SUBEND	FC9B SW
AP	FCAA SWAP1		
FCBF SWAP3	FCA1 SWAPA	F810 TAB	F823 TA
B1	F82A TAB2		
F0E3 TBLENT	=000E TBLEN	F22B TSTCT1	F238 TS
TCT2	F229 TSTCTL		
F787 UPDNOM	F488 VBWA1T	F087 WFAK	F08C WF
AK1	F060 WFL		
F0D2 WSIOSB	F046 WTLR	F361 XBOOT	F138 ZE
RORM	F160 ZOSRAM		
F163 ZOSRM2	F16E ZOSRM3	F04A ZTBUF	