

GRAPHIXSOURCE.ED

E7E9 ***** 1 * -**E7E9 !SYB*****-59648 TO 59650 FOR BY
 6 COMMANDS IE \$E900-\$E90
 E7E9 ***** 2 !***** 8000 VERSION *****
 00B7 ***** 3 CHARPOINT -#B7
 87F7 ***** 4 CHARSTORE -#87F7 !#83F7 FAT40
 00C8 ***** 5 MEMOFF -#CB
 E7E9 ***** 6 !
 E7E9 A207 7 MOVEBYTES LDX £807
 E7EB A007 8 LDY £807
 E7ED B1B7 9 GETBYTE1 LDA (CHARPOINT),Y
 E7EF 9DF787 10 STA CHARSTORE,X
 E7F2 CA 11 DEX
 E7F3 88 12 DEY
 E7F4 10F7 13 BPL GETBYTE1
 E7F6 24CB 14 BIT MEMOFF
 E7FB 1003 15 BPL RETURNTEXT
 E7FA 4CD6EC 16 JMP LATCHREPLACE
 E7FD 4CDEEC 17 RETURNTEXT JMP WRITETEXT
 E800 ***** 18 !
 E900 ***** 19 * -**E900 !
 E900 ***** 20 !
 E900 ***** 21 !FLAG -X01000000 FOR X8>XE
 E900 ***** 22 !FLAG -X00000000 FOR X8<XE
 E900 ***** 23 !FLAG -X10000000 FOR Y8>YE
 E900 ***** 24 !FLAG -X00000000 FOR Y8<YE
 BF00 ***** 25 SYNTAXERROR -#BF00 !
 BD98 ***** 26 EVALEXP -#BD98 !
 BD84 ***** 27 TESTTYPE -#BD84 !
 C92D ***** 28 FLPINT -#C92D !
 CD51 ***** 29 ADJUSTACC1 -#CD51 !
 C2EA ***** 30 EVALPOSINT -#C2EA !
 C7B8 ***** 31 DISCSTRING -#C7B8 !
 C921 ***** 32 GET2PARAMS -#C921 !
 BD87 ***** 33 TYPEIMSMATCH -#BD87 !
 C8D7 ***** 34 GET1PARAM -#C8D7 !
 C8D4 ***** 35 GETNUMERIC -#C8D4 !
 D399 ***** 36 ROUTINE -#D399 !
 BEF5 ***** 37 CHECKCOMMA -#BEF5 !
 B883 ***** 38 SCANBASIC -#B883 !
 E900 ***** 39 !
 E900 ***** 40 !STACKSTART-\$0100 DECLARED IN LINE 611
 E455 ***** 41 IRQVEC -#E455 !\$E62E !2.0B
 E900 ***** 42 !LOWTABLE-\$E6BB !9" BASIC 4.0
 E900 ***** 43 !-#E798 12" BASIC 4.0
 E900 ***** 44 !-#E748 BASIC 2.0
 E1E6 ***** 45 LOWTABLE -#E1E6 !FOR 80 COL TABLE TO BE INSERTED
 D
 00FF ***** 46 FLAG -#FF !
 93EA ***** 47 XSTART -#93EA !ONE BYTE
 93EC ***** 48 XEND -#93EC !TWO BYTE
 00C0 ***** 49 XB -#CO !TWO BYTE
 00FB ***** 50 XPLOT -#FB !TWO BYTE
 93EE ***** 51 XPOINT -#93EE !TWO BYTE
 93FO ***** 52 YSTART -#93FO !ONE BYTE
 93F1 ***** 53 YEND -#93F1 !ONE BYTE
 00C8 ***** 54 YB -#CB !ONE BYTE
 00B7 ***** 55 YPLOT -#B7 !ONE BYTE
 93F2 ***** 56 YPOINT -#93F2 !ONE BYTE
 00B8 ***** 57 FLAG1 -#B8 !ONE BYTE
 00C9 ***** 58 BYTE -#C9 !TWO BYTE
 9000 ***** 59 SCREENSTART -#9000 !LOCATION OF FIRST SCREEN BYTE
 93F3 ***** 60 TESTBYTE -#93F3 !BYTE TO TEST FOR RAM ON
 00B4 ***** 61 STACKCOPY -#B4 !
 00B1 ***** 62 ONEBYTE -#B1 !ONE BYTE
 00B2 ***** 63 TWOBYTE -#B2 !TWO BYTE
 00B4 ***** 64 MULTIPLIER -#B4 !ONE BYTE
 00B5 ***** 65 MULTIPLICAND -#B5 !TWO BYTE
 00FD ***** 66 RESULT -#FD !TWO BYTE
 C996 ***** 67 STATUSWORD -#96 !
 E900 ***** 68 !
 E900 ***** 69 !TEXT VARIABLE STORES
 00BC ***** 70 CHARNUMBER -#BC !
 A7FB ***** 71 CHARBLOCKSTART -#A7FB !STORE FOR POINTER TO USER DEF
 NED TEXT(43000)
 EFFF ***** 72 LATCH -#EFF !
 0279 ***** 73 LATCHCOPY -#0279 !HR-40 LATCH AT #88FF
 00CC ***** 74 MASKONE -#CC !COPY OF LATCH REGISTER (433)
 00FB ***** 75 CHAR2 -#FB !TO MASK CHARACTER AND SCREEN
 00BD ***** 76 PLOTDIR -#BD !HORIZONTAL PLOT-#FF, VERTICAL PL
 DT=0
 0032 ***** 77 STRINGPTR -#32 !
 00B8 ***** 78 TEXTYPE -#BE !#40-OVERLAY, #FF-TEXT, 00-FLIP
 E900 ***** 79 !
 E900 ***** 80 !MAP VARIABLES
 00FF ***** 81 MASKCOPY -#FF !
 00FB ***** 82 MAPTYPE -#FB !
 00CE ***** 83 XCOPY -#CE !00-CLEAR, FF-SET
 00C0 ***** 84 BYTECOPY -#CO !
 E900 ***** 85 !
 E900 EA 86 NOP
 E701 EA 87 NOP
 E902 BA 88 T8X
 E903 B6B4 89 STX STACKCOPY
 E905 20F5BE 90 JBR CHECKCOMMA
 E908 B496 91 STY STATUSWORD !Y=0
 E90A A20D 92 !
 E90C DD2AE9 93 LDX £LASTCOM-COMMAND
 E90F FO10 94 COMMANDLOOP CMP COMMAND,X
 E911 CA 95 BEQ COMMANDFOUND
 E912 10F8 96 DEX
 E914 ***** 97 BPL COMMANDLOOP
 E914 ***** 98 !NO COMMAND FOUND / DEFAULT TO SET LATCH
 E914 20D4CB 99 POKER JSR GETNUMERIC
 E917 8A 100 TXA
 E918 290F 101 LATCHMASK AND £X00001111 !4 BIT LATCH
 E91A BDFFEF 102 STA LATCH
 E91D BD77902 103 STA LATCHCOPY
 E920 60 104 RTS
 E921 ***** 105 !
 E921 BD38E9 106 COMMANDFOUND LDA HICOMMAND,X

E924 48 107
 E925 BD46E9 108
 E926 48 109
 E929 60 110
 E92A ***** 111 !
 E92A 4F4B50 112 COMMAND .B "OKP", \$A4, \$B9, "TMECIRFD"
 E937 53 113 LASTCOM .B "6"
 E938 ***** 114 !
 E938 E7E7E7 115 HICOMMAND .B >KILL-1, >KILL-1, >CHARSET-1, >OVERLAY
 E93C E8EBED 116 .B >FLIPTEXT-1, >TEXT, >MAP-1, >EXAMINE-1
 E940 EEEEEE 117 .B >CLEAR-1, >INVERT, >RESET, >FLIP, >DOT, >SET-1
 E941 535371 118 LOCOMMAND .B <KILL-1, <CHARSET-1, <OVERLAY
 E94A C4C773 119 .B <FLIPTEXT-1, <TEXT, <MAP-1, <EXAMINE-1
 E94E 6F7287 120 .B <CLEAR-1, <INVERT, <RESET, <FLIP, <DOT, <SET-1
 E954 ***** 121 !
 E954 A217 122 KILL LDX £817
 E956 2C 123 .B \$2C
 E957 A204 124 MOVELOOP LDX £806
 E959 BD99D3 125 MOVERTN LDA ROUTINE, X
 E95C 9570 126 STA \$70, X
 E95E E009 127 CPX £89
 E960 F0F3 128 BEQ MOVELOOP
 E962 CA 129 DEX
 E963 10F4 130 SPL MOVERTN
 E965 78 131 SEI
 E966 A955 132 LDA £<IRQVEC
 E968 A0E4 133 LDY £>IRQVEC
 E96A 8590 134 STA \$90
 E96C 8491 135 STY \$91
 E96E 58 136 CLI
 E96F 4C7000 137 JMP \$70
 E972 ***** 138 !
 E972 207000 139 CHARSET JBR \$70
 E973 20F5BE 140 JBR CHECKCOMM
 E978 2084BD 141 JBR TESTTYPE
 E979 202DC9 142 JBR FLPI
 E97E BCF8A7 143 STY CHARBLOCKSTART
 E981 BDF9A7 144 STA CHARBLOCKSTART+1
 E984 60 145 RTS
 E985 ***** 146 !
 E985 A900 147 SET LDA £800 !SET FLAG1=0
 E987 2CA901 148 RESET BIT \$01A9 !SET FLAG1=1
 E98A 2CA902 149 FLIP BIT \$02A9 !SET FLAG1=2
 E98D 2CA903 150 DOT BIT \$03A9 !SET FLAG1=3
 E990 20F6EE 151 JBR CHECKRAMON2
 E993 ***** 152 !
 E993 A900 153 LDA £800
 E995 85FF 154 STA FLAG
 E997 207000 155 JBR \$70
 E99A C94C 156 CMP £'L
 E99C F006 157 BEQ INPUT
 E99E C6FF 158 DEC FLAG
 E9A0 C950 159 CMP £'P
 E9A2 D02F 160 BNE SYNTAX
 E9A4 207000 161 INPUT JBR \$70
 E9A7 20F5BE 162 JBR CHECKCOMM
 E9AA 203DEC 163 JBR NUMBERIN+3
 E9AD F027 164 BEQ ONESET !ONLY ONE PAIR ENTERED
 E9AF 24FF 165 BIT FLAG
 E9B1 3020 166 BMI SYNTAX !TEST FOR ILLEGAL SECOND PARAM
 TERB
 E9B3 20BDEE 167 CHECK1 JBR JUST2
 E9B6 24FF 168 BIT FLAG
 E9B8 3035 169 BMI SETPOINT
 E9BA ***** 170 !
 E9BA 203AEC 171 JBR NUMBERIN
 E9BD 20D4EE 172 SECOND JBR CHECKY
 E9C0 20CAEE 173 JBR STOREND
 E9C3 ADEE93 174 LDA XPOINT
 E9C6 4DF293 175 EOR YPOINT
 E9C9 2901 176 AND £X00000001
 E9CB D034 177 BNE START
 E9CD A701 178 LDA £X00000001
 E9CF 85FF 179 STA FLAG
 E9D1 D02E 180 BNE START
 E9D3 ***** 181 !
 E9D3 4C00BF 182 SYNTAX JMP SYNTAXERROR
 E9D4 ***** 183 !
 E9D6 24FF 184 ONESET BIT FLAG
 E9D8 30D9 185 BMI CHECK1
 E9DA 20D4EE 186 JBR CHECKY
 E9DD ADF193 187 LDA YEND !YPOINT FOR CONT FROM LAST POIN
 T
 E9E0 BDF293 188 STA YPOINT
 E9E3 ADEE93 189 LDA XEND !XPOINT FOR CONT
 E9E4 ACED93 190 LDY XEND+1 !XPOINT+1 FOR CONT
 E9E7 20C3EE 191 JBR STOREPOINT+3
 E9EC 4CBDE9 192 JMP SECOND
 E9EF ***** 193 !
 E9EF 20CAEE 194 SETPOINT JBR STOREND
 E9F2 20C0EE 195 JBR STOREPOINT
 E9F5 4DF193 196 EOR YEND
 E9F8 2901 197 AND £X00000001
 E9FA F002 198 BEQ PLOTJMP
 E9FC E6FF 199 INC FLAG
 E9FE 4C2CEB 200 PLOTJMP JMP PLOT1
 EA01 ***** 201 !
 EA01 ***** 202 !FIND GRADIENT OF LINE AND SET FLAG FOR SLOPE
 EA01 A5FF 203 START LDA FLAG !CLEAR FLAG
 EA03 2901 204 AND £X00000001 !EXCEPT FOR BIT 0
 EA05 85FF 205 STA FLAG
 EA07 38 206 SEC
 EA08 ADEE93 207 LDA XEND
 EA08 EDEE93 208 SBC XPOINT
 EA0E 85C0 209 STA XG
 EA10 ADED93 210 LDA XEND+1
 EA13 EDEF93 211 SBC XPOINT+1
 EA16 85C1 212 STA XG+1
 EA18 8016 213 SCS YTEST
 EA1A 49FF 214 EOR £FFF

EA1C	85C1	215	STA	XG+1	! TWO'S COMPLIMENT OF XG	
EA1E	A5C0	216	LDA	XG		
EA20	49FF	217	EOR	£FFF		
EA22	6901	218	ADC	£\$01		
EA24	85C0	219	STA	XG		
EA26	D002	220	BNE	YTESTA		
EA28	E6C1	221	INC	XG+1		
EA2A	A5FF	222	YTESTA	LDA	FLAG	! SET FLAG
EA2C	0740	223	ORA	£X01000000	! DECREMENTING X	
EA2E	85FF	224	STA	FLAG		
EA30	*****	225	!			
EA30	38	226	YTEST	SEC		
EA31	ADF193	227	LDA	YEND		
EA34	EDF293	228	SBC	YPOINT		
EA37	85CB	229	STA	YG		
EA39	B00C	230	BCS	GRADO		
EA3B	49FF	231	EOR	£FFF		
EA3D	6901	232	ADC	£\$01		
EA3F	85CB	233	STA	YG		
EA41	A5FF	234	LDA	FLAG		
EA43	0780	235	ORA	£X10000000	! DEC Y	
EA45	85FF	236	STA	FLAG		
EA47	*****	237	!			
EA47	A5CB	238	GRADO	LDA	YG	
EA49	F010	239	SEQ	PLOTHORIZ		
EA4B	A5C1	240	LDA	XG+1		
EA4D	D033	241	BNE	TILTX		
EA4F	A5C0	242	LDA	XG		
EA51	F014	243	SEQ	PLOTVERT		
EA53	C5CB	244	CMP	YG		
EA55	F01C	245	SEQ	PLOT48		
EA57	B029	246	SBC	TILTX		
EA59	7063	247	SBC	TILTY		
EA5B	*****	248	!			
EA5B	202CEB	249	PLOTHORIZ	JSR	PLOT1	! SET BYTE FROM XPOINT & YPOINT
EA5E	20F6EA	250	TEBTXH	JSR	XCOMPARE	
EA61	2078EB	251		JSR	PLOT2	
EA64	4C5EEA	252		JMP	TEBTXH	
EA67	*****	253	!			
EA67	202CEB	254	PLOTVERT	JSR	PLOT1	! SET BYTE FROM XPOINT & YPOINT
EA6A	2019EB	255	TESTYY	JSR	YCOMPARE	
EA6D	2078EB	256		JSR	PLOT2	
EA70	4C6AEA	257		JMP	TESTYY	
EA73	*****	258	!			
EA73	202CEB	259	PLOT48	JSR	PLOT1	
EA76	2019EB	260	TESTXY	JSR	YCOMPARE	
EA79	20F9EA	261		JSR	ALTERX	
EA7C	2078EB	262		JSR	PLOT2	
EA7F	4C76EA	263		JMP	TESTXY	
EA82	*****	264	!			
EA82	A5C1	265	TILTX	LDA	XG+1	
EA84	4A	266		LBR	A	! DIVIDE XG BY 2
EA85	85B3	267		STA	TWOBYTE+1	
EA87	A5C0	268		LDA	XG	
EA89	6A	269		ROR	A	
EA8A	85B2	270		STA	TWOBYTE	
EA8C	202CEB	271	PLOTX	JSR	PLOT1	
EA8F	20F6EA	272	TESTXX	JSR	XCOMPARE	
EA92	18	273		CLC		
EA93	A5B2	274		LDA	TWOBYTE	
EA95	65CB	275		ADC	YG	
EA97	85B2	276		STA	TWOBYTE	
EA99	7002	277		BCC	NOINCTB1	
EA9B	E6B3	278		INC	TWOBYTE+1	
EA9D	38	279	NOINCTB1	SEC		
EA9E	A5B2	280		LDA	TWOBYTE	
EA9O	E5C0	281		SBC	XG	
EA92	A5B3	282		LDA	TWOBYTE+1	
EA94	E5C1	283		SBC	XG+1	
EA96	9010	284		SBC	PLOTX2	
EAAB	201CEB	285		JSR	ALTERY	
EAAB	38	286		SEC		
EAAC	A5B2	287		LDA	TWOBYTE	
EAAD	E5C0	288		SBC	XG	
EA80	85B2	289		STA	TWOBYTE	
EA82	A5B3	290		LDA	TWOBYTE+1	
EA84	E5C1	291		SBC	XG+1	
EA86	85B3	292		STA	TWOBYTE+1	
EA88	2078EB	293	PLOTX2	JSR	PLOT2	
EA8B	4C8FEA	294		JMP	TESTXX	
EA8E	*****	295	!			
EA8E	A5C8	296	TILTY	LDA	YG	
EAC0	4A	297		LBR	A	! DIVIDE YG BY 2
EAC1	85B2	298		STA	TWOBYTE	
EAC3	A900	299		LDA	£0	
EAC5	85B3	300		STA	TWOBYTE+1	
EAC7	202CEB	301	PLOTY	JSR	PLOT1	
EACA	2019EB	302	TESTYY	JSR	YCOMPARE	
EACD	18	303		CLC		
EACE	A5B2	304		LDA	TWOBYTE	
EAD0	65CB	305		ADC	XG	
EAD2	85B2	306		STA	TWOBYTE	
EAD4	A5B3	307		LDA	TWOBYTE+1	
EAD6	65C1	308		ADC	XG+1	
EAD8	85B3	309		STA	TWOBYTE+1	
EADA	D004	310		BNE	INCXPLOT	
EADC	A5B2	311		LDA	TWOBYTE	
EADE	C5CB	312		CMP	YG	
EAE0	900E	313		BCC	PLOTY2	
EAE2	20F9EA	314	INCXPLOT	JSR	ALTERX	
EAE5	38	315		SEC		
EAE6	A5B2	316		LDA	TWOBYTE	
EAE8	E5C0	317		SBC	YG	
EAEA	85B2	318		STA	TWOBYTE	
EAE0	D002	319		BCC	PLOTY2	
EAE3	C6B3	320		DEC	TWOBYTE+1	
EAF0	2078EB	321	PLOTY2	JSR	PLOT2	
EAF3	4CCAFA	322		JMP	TESTYY	
EAF6	*****	323	!			
EAF6	201CEF	324	XCOMPARE	JSR	CMPXEND	
EAF9	24FF	325	ALTERX	BIT	FLAG	

EAFB 700E 326
 EAFD 46CC 327
 EAFF 9007 328
 EB01 A980 329
 EB03 85CC 330
 EB05 2070EF 331
 EB08 4C77EF 332 INCX1
 EB0B 06CC 333 DECX
 EB0D 9007 334
 EB0F A901 335
 EB11 85CC 336
 EB13 2080EF 337
 EB16 4C89EF 338 DECXO
 EB19 **** 339 !
 EB19 2013EF 340 YCOMPARE
 EB1C 24FF 341 ALTERY
 EB1E 3006 342
 EB20 202DEF 343
 EB23 4C53EF 344
 EB24 **** 345 !
 EB26 202DEF 346 DECY
 EB29 4C34EF 347
 EB2C **** 348 !
 EB2C **** 349 ! CONVERT POINT TO BYTE AND SET BIT
 EB2C ADEF93 350 PLOT1
 START+(OT07)*1024
 EB2F 85CA 351
 EB31 ADEE93 352
 EB34 48 353
 EB35 46CA 354
 EB37 6A 355
 EB38 4A 356
 EB39 4A 357
 EB3A 85C9 358
 EB3C 202DEF 359
 EB3F 48 360
 EB40 4A 361
 EB41 4A 362
 EB42 4A 363
 EB43 AB 364
 EB44 B9E6E1 365
 EB47 48 366
 EB48 A203 367
 EB4A C014 368
 EB4C B00B 369
 EB4E CA 370
 EB4F COOD 371
 EB51 B006 372
 EB53 CA 373
 EB54 C007 374
 EB56 B001 375
 EB58 CA 376
 EB59 AB 377 FOUNDY
 EB5A 200BEF 378
 EB5D AB 379
 EB5E 2907 380
 EB60 AB 381
 EB61 B9B9EF 382
 EB64 18 383
 EB65 200EEF 384
 EB68 AB 385
 EB69 2907 386
 EB6B AB 387
 EB6C CB 388
 EB6D A5BB 389
 EB6F C904 390
 EB71 F017 391
 EB73 2095EF 392
 EB74 85CC 393 SETBYTE
 EB78 A5CC 394 PLOT2
 EB7A A6BB 395
 EB7C FOOD 396
 EB7E E001 397
 EB80 F020 398
 EB82 E003 399
 EB84 FOOC 400
 EB86 **** 401 !
 EB86 51C9 402 FLIPLINE EOR (BYTE),Y
 EB88 91C9 403 STA (BYTE),Y
 EB8A 60 404 RETURN1 RTS
 EB8B **** 405 !
 EB8B 49FF 406 SETLINE EOR \$0FF
 EB8D 31C9 407 AND (BYTE),Y
 EB8F 91C9 408 STA (BYTE),Y
 EB91 60 409 RTS
 EB92 **** 410 !
 EB92 48 411 DOTLINE PHA !SAVE BYTE
 EB93 A5FF 412 LDA FLAG
 EB95 4901 413 EOR \$00000001 !TOGGLE BIT 0
 EB97 85FF 414 STA FLAG
 EB99 AB 415 PLA !GET BYTE FOR DISPLAY
 EB9A 66FF 416 ROR FLAG !TEST FOR BIT 0 SET OR RESET
 EB9C 08 417 PHP !RESTORE FLAG
 EB9D 26FF 418 ROL FLAG !RETURN CARRY FLAG
 EB9F 28 419 BPL !SET POINT
 EBAA 90E9 420
 EBAA 11C9 421 RESETLINE ORA (BYTE),Y
 EBAA 91C9 422 STA (BYTE),Y
 EBAB 60 423 RTS
 EBAT **** 424 !
 EBAT **** 425 ! EXAMINE FOR POINT SET OR RESET
 EBAT 20F4EE 426 EXAMINE JSR CHECKRAMON
 EBAA 207000 427 JSR #70 !SKIP ','
 EBAD 203AEC 428 JSR NUMBERIN
 EBBD D03C 429 BNE SYNTAX1BK
 EBBD 20BDEE 430 JSR JUSTZ
 EBBD 20CAEE 431 JSR STOREND
 EBBD 202CEB 432 EXAMINEIN JSR PLOT1
 EBBD 2095EF 433 JSR LSRMASK
 EBBD 31C9 434 OUTMASK1 AND (BYTE),Y
 EBBD D002 435 BNE NOTSET

EBC2	E694	436	INC STATUSWORD		
EBC4	60	437	NOTSET RTB		
EBC5	*****	438	!		
EBC5	*****	439	! TEXT ROUTINE		
EBC5	A900	440	FLIPTEXT LDA £000	! TEXT FLIP	
EBC7	2CA9FF	441	TEXT BIT \$FFA9	! TEXT STRAIGHT	
EBCA	2CA940	442	OVERLAY BIT \$40A9	! OVERLAY TEXT	
EBCD	B5BE	443	STA TEXTYPE		
EBCF	20F4EE	444	JSR CHECKRAMON		
EBD2	A9FF	445	LDA £0FF		
EBD4	B5B1	446	STA ONEBYTE		
EBD6	B5BD	447	STA PLOTDIR		
EBD8	207000	448	JSR *70		
EBD8	C952	449	CMP £'R	! REVERSE TEXT	
EBD8	F004	450	BEQ IPBYTE		
EBD8	C94E	451	CMP £'N	! NORMAL TEXT	
EBE1	D00B	452	BNE SYNTAX1BK		
EBE3	E6B1	453	INC ONEBYTE		
EBE5	207000	454	JSR *70	! SET TO ZERO	
EBE8	C948	455	CMP £'H		
EBC8	F006	456	BEQ IPBYTE1		
EBC8	C956	457	CMP £'V		
EBC8	D074	458	SYNTAX1BK BNE SYNTAX1		
EBC8	E6BD	459	SAVECHAR INC PLOTDIR		
EBC8	207000	460	JSR *70		
EBC8	207000	461	JSR *70		
EBC8	2098BD	462	JSR EVALEXP	! I/P & EVALUATE STRING OR NUMBER	
IC EXPRESSION					
EBCB	2407	463	BIT \$07		
EBCD	1057	464	BPL NUMERIC		
EBCF	20BBC7	465	JSR DISCSTRING		
EC02	C900	466	CMP £000		
EC04	F02F	467	BEQ NUMBERIN1		
EC06	B5B2	468	STA TWOBYTE		
EC08	B632	469	STX STRINGPTR		
EC0A	B433	470	STY STRINGPTR+1		
EC0C	207600	471	JSR *76		
EC0F	F005	472	BEQ CONTEXT1		
EC11	20BAEE	473	JSR ALL3		
EC14	C696	474	CONTEXT DEC STATUSWORD		
EC16	2046ED	475	CONTEXT1 JSR GETSTRCHAR		
EC19	900E	476	BCC NEXTTEXT		
EC1B	2496	477	BIT STATUSWORD		
EC1D	1007	478	BPL UPTEXT		
EC1F	209FEC	479	JSR BACKIN2		
EC22	E696	480	INC STATUSWORD		
EC24	F003	481	BEQ NEXTTEXT		
EC26	2072EC	482	UPTEXT JSR CONTLINE		
EC29	C6B2	483	NEXTTEXT DEC TWOBYTE		
EC2B	F097	484	NOTSKIP BEQ NOTBET	! RTB	
EC2D	E632	485	INC STRINGPTR		
EC2F	D0E8	486	BNE CONTEXT1		
EC31	E633	487	INC STRINGPTR+1		
EC33	D0E1	488	BNE CONTEXT1		
EC35	*****	489	!		
EC35	*****	490	!		
EC35	A2FD	491	NUMBERIN1 LDX £256-3		
EC37	4CDAAE	492	JMP ERRORExit		
EC3A	207000	493	NUMBERIN JSR *70		
EC3D	20B1EE	494	JSR GETINT+3	! INPUT X	
EC40	A561	495	LDA \$61		
EC42	A462	496	LDY \$62		
EC44	B512	497	STA \$12		
EC46	B411	498	STY \$11		
EC48	20AEEE	499	JSR GETINT	! INPUT Y	
EC4B	A662	500	LDX \$62		
EC4D	A561	501	LDA \$61		
EC4F	F002	502	BEQ YOK		
EC51	A2FF	503	LDX £0FF		
EC53	4C7600	504	YOK JMP *76		
EC54	*****	505	!		
EC56	2087BD	506	NUMERIC JSR TYPEMISMATCH		
EC59	20D7CB	507	JSR GET1PARAM	! I/P BYTE	
EC6C	B6BC	508	STX CHARNUMBER		
EC5E	F012	509	BEQ CONTLINE		
EC60	C92C	510	CMP £02C		
EC62	F035	511	BEQ CONT1		
EC64	4C00BF	512	JMP SYNTAXERROR		
EC67	*****	513	!		
EC67	ACF293	514	VERTICAL LDY YPOINT		
EC6A	F0BF	515	BEQ NOTSKIP		
EC6C	CEF293	516	DEC YPOINT		
EC6F	4C9FEC	517	JMP BACKIN2		
EC72	*****	518	!		
EC72	A5BD	519	CONTLINE LDA PLOTDIR		
EC74	F0F1	520	BEQ VERTICAL		
EC76	18	521	HORIZ CLC		
EC77	ADF293	522	LDA YPOINT		
EC7A	6907	523	ADC £007	! RESET YPOINT	
EC7C	BDF293	524	STA YPOINT		
EC7F	18	525	CLC		
EC80	ADEE93	526	LDA XPOINT		
EC83	ACEF93	527	LDY XPOINT+1		
EC86	6908	528	ADC £008		
EC88	9001	529	BCC SKIPY		
EC8A	C8	530	INY		
EC8B	C000	531	CPY £000		
EC8D	F00D	532	BEQ BACKIN		
EC8F	C001	533	CPY £001		
EC91	D0A2	534	BNE NUMBERIN1		
EC93	C939	535	CMP £320-256-7	! TO PREVENT WRAP AROUND	
EC95	B07E	536	BCC NUMBERIN1		
EC97	9003	537	BCC BACKIN		
EC99	20BAEE	538	!		
EC9C	20C3EE	539	CONT1 JSR ALL3		
EC9F	A900	540	BACKIN JSR STOREPOINT+3		
ECA1	B5B8	541	BACKIN2 LDA £000		
ECA3	A5BC	542	STA CHARPOINT+1		
ECA5	0A	543	LDA CHARNUMBER		
ECA6	26BB	544	ASL A		
		545	ROL CHARPOINT+1		

ECA8	OA	546	ASL A	
ECA9	24BB	547	ROL CHARPOINT+1	
ECA8	OA	548	ASL A	
ECA8	24BB	549	ROL CHARPOINT+1	
ECAE	18	550	CLC	
ECAF	6DF8A7	551	ADC CHARBLOCKSTART	
EBC2	85B7	552	STA CHARPOINT	
EBC4	A5BB	553	LDA CHARPOINT+1	
EBC6	6DF9A7	554	ADC CHARBLOCKSTART+1	
EBC9	85BB	555	STA CHARPOINT+1	
ECCB	*****	556		
ECCB	A000	557	LDY £800	
ECBD	84CB	558	STY MEMOFF	
ECBF	2CF9A7	559	BIT CHARBLOCKSTART+1	
ECC2	100F	560	BPL SETXY	
ECC4	C4CB	561	DEC MEMOFF	
ECC6	BA	562	RETRACE	TBX
ECC7	98	563		TYA
ECC8	7DFE00	564		STA STACKSTART-2,X
ECCB	BDFE00	565	STACKLOOP	LDA STACKSTART-2,X
ECCE	F0FB	566		BEQ STACKLOOP
O100	*****	567	STACKSTART	-£0100
ECDO	BCFFEF	568		STY LATCH
ECD3	4CE9E7	569	SETXY	JMP MOVEBYTES
ECD4	AD7902	570	LATCHREPLACE	LDA LATCHCOPY
ECD9	0901	571		ORA £801
ECDB	BDFFEF	572		STA LATCH
ECDE	202CEB	573	WRITETEXT	JSR PLOT1
ECE1	84FF	574		STY FLAG
ECE3	A900	575		LDA £800
ECE5	AA	576		TAX
ECE6	88	577	LOOPDEC1	DEY
ECE7	F004	578		BEQ MASK1
ECE9	38	579		SEC
ECEA	6A	580		ROR A
ECEB	90F9	581		BCC LOOPDEC1
ECED	85CC	582	MASK1	STA MASKONE
ECEF	B1C9	583	LOOPCHAR	LDA (BYTE),Y
ECF1	49FF	584		EOR £0FF
ECF3	24BE	585		BIT TEXTYPE
ECF5	1002	586		BPL STOREBYTE1
ECF7	25CC	587		AND MASKONE
ECF9	85B3	588	STOREBYTE1	STA TWOBYTE+1
ECFB	84FB	589		STY CHAR2
ECFD	BDF7B7	590		LDA CHARSTORE,X
ED00	45B1	591		EOR ONEBYTE
ED02	A4FF	592		LDY FLAG
ED04	88	593	LOOPDEC2	DEY
ED05	F00E	594		BEQ MASK2
ED07	4A	595		LBR A
ED08	66FB	596		ROR CHAR2
ED0A	90FB	597		BCC LOOPDEC2
EDOC	*****	598		
EDOC	EA	599		NOP
EDOD	45B3	600	FLIPTEXT1	EOR TWOBYTE+1
EDOF	500A	601		BVC BITS
ED11	45FB	602	FLIPTEXT2	EOR CHAR2
ED13	5019	603		BVC INVERT2
ED15	*****	604		
ED15	24BE	605	MASK2	BIT TEXTYPE
ED17	80F4	606		BVC FLIPTEXT1
ED19	05B3	607		ORA TWOBYTE+1
ED1B	49FF	608	BITS	EOR £0FF
ED1D	91C9	609		STA (BYTE),Y
ED1F	C8	610		INY
ED20	B1C9	611		LDA (BYTE),Y
ED22	24BE	612		BIT TEXTYPE
ED24	1002	613		BPL INVERTBYTE
ED26	85CC	614		ORA MASKONE
ED28	49FF	615	INVERTBYTE	EOR £0FF
ED2A	80E8	616		BVC FLIPTEXT2
ED2C	05FB	617		ORA CHAR2
ED2E	49FF	618	INVERT2	EOR £0FF
ED30	91C9	619		STA (BYTE),Y
ED32	88	620		DEY
ED33	E8	621		INX
ED34	E008	622		CPX £808
ED36	D002	623		BNE NEXTLINE
ED38	60	624	END1	RTS
ED39	EA	625		NOP
ED3A	202DEF	626	NEXTLINE	JSR COMPAREY
ED3D	C9C7	627		CMP £199
ED3F	F0F7	628		BEQ END1
ED41	2034EF	629		JSR DOWNBYTEY
ED44	D0A9	630	LOOPBACK	BNE LOOPCHAR
ED46	*****	631		
ED46	A000	632	GETSTRCHAR	LDY £0
ED48	B132	633		LDA (STRINGPTR),Y
ED4A	297F	634		AND £07F
ED4C	C912	635		CMP £012
ED4E	D008	636		BNE CONCONT
ED50	A9FF	637	RVSFLIP	LDA £0FF
ED52	45B1	638		EOR ONEBYTE
ED54	85B1	639		STA ONEBYTE
ED56	18	640		CLC
ED57	60	641	FLIPBACK	RTS
ED58	*****	642		
ED58	C920	643	CONCONT	CMP £820
ED5A	90FB	644		BCC FLIPBACK
ED5C	B132	645		LDA (STRINGPTR),Y
ED5E	C940	646		!RE-GET CHAR
ED60	900E	647		CMP £840
ED62	C7C0	648		BCC STORE
ED64	9008	649		CMP £8C0
ED66	C9FF	650		BCC SUBTRACT40
ED68	9002	651		CMP £0FF
ED6A	E922	652		BCC SUBTRACT80
ED6C	E940	653	SUBTRACT80	BBC £840
ED6E	E93F	654	SUBTRACT40	BBC £83F
ED70	85BC	655	STORE	STA CHARNUMBER
ED72	38	656		SEC

ED73 00
 ED74 *****
 ED74 20F4EE
 ED77 A7FF
 ED79 85FB
 ED79 207000
 ED7E C946
 ED80 F007
 ED82 C945
 ED84 F003
 ED86 4C00BF
 ED87 E6FB
 ED88 207000
 ED8E F003
 ED90 20BAAE
 ED93 ADEE93
 ED96 ACEF93
 ED99 85CE
 ED9B 84CF
 ED9D 202CEB
 EDA0 209EEF
 EDA3 2095EF
 EDA4 *****
 EDA6 85CC
 EDA8 85FF
 EDA9 20B2EF
 EDAD D012
 EDAF 202DEF
 EDB2 C9C7
 EDB4 F032
 EDB6 20A7EF
 EDB9 2034EF
 EDBC 209EEF
 EDBF DOE9
 EDC1 *****
 EDC1 A5CE
 EDC3 BDEE93
 EDC6 A5CF
 EDC8 BDEF93
 EDCB 202DEF
 EDCCE F012
 EDD0 20A7EF
 EDD3 2053EF
 EDD6 209EEF
 EDD9 A5FF
 EDDB 85CC
 EDDD 20B2EF
 EDE0 F006
 EDE2 60
 EDE3 *****
 EDE3 20B2EF
 EDE6 D056
 EDE8 ADEF93
 EDEB D005
 EDED ADEE93
 EDF0 F03B
 EDF2 2089EF
 EDF5 06CC
 EDF7 90EA
 EDF9 2080EF
 EDFC B1C9
 EDFE C5FB
 EEOO D01C
 EEO2 ADEF93
 EEO5 D007
 EEO7 ADEE93
 EEOA C907
 EEOC F016
 EEOE 38
 EEOF ADEE93
 EE12 E908
 EE14 BDEE93
 EE17 B0E0
 EE19 CEEF93
 EE1C F0D8
 EE1E A901
 EE20 85CC
 EE22 DOBF
 EE24 *****
 EE24 BCEE93
 EE27 *****
 EE27 B1C9
 EE29 C5FB
 EE2B F02D
 EE2D *****
 EE2D A980
 EE2F 85CC
 EE31 20B2EF
 EE34 F003
 EE36 4CC1ED
 EE39 A5CC
 EE3B 2086EB
 EE3E 2077EF
 EE41 46CC
 EE43 90EC
 EE45 *****
 EE45 2070EF
 EE48 ADEF93
 EE4B F007
 EE4D ADEE93
 EE50 C940
 EE52 B0E2
 EE54 B1C9
 EE56 C5FB
 EE58 D0D3
 EE5A A9FF
 EE5C 45FB
 EE5E 71C9
 EE60 18
 EE61 ADEE93

658 ! RTS
 659 ! MAP OR FILL IN AREA BOUNDED BY LINES OR SCREEN EDGE
 660 MAP JBR CHECKRAMON
 661 LDA £FFF
 662 STA MAPTYPE
 663 JBR #70
 664 CMP £'F
 665 BEQ MAPIN ! FILL AREA
 666 CMP £'E
 667 BEQ REBMAP ! ERASE AREA
 668 JMP SYNTAXERROR
 669 REBMAP INC MAPTYPE
 670 MAFIN JBR #70
 671 BEQ MAPOLDSET ! PRE-DEFINED POINT
 672 JBR ALL3
 673 MAPOLDSET LDA XPOINT
 674 LDY XPOINT+1
 675 STA XCOPY
 676 STY XCOPY+1
 677 JBR PLOT1
 678 JBR BYTETOCOPY
 679 JBR L8RMASK
 680 !
 681 TESTBIT1 STA MASKONE
 682 STA MASKCOPY
 683 TESTBIT2 JBR EORMAP
 684 BNE NEXTLINECHECK
 685 JBR COMPAREY
 686 CMP £199
 687 BEQ LOOPMASK1A ! BOTTOM LINE REACHED
 688 DOWNY JBR COPYTOBYTE
 689 JBR DOWNBYTEY
 690 JBR BYTETOCOPY
 691 BNE TESTBIT2
 692 !
 693 NEXTLINECHECK LDA XCOPY
 694 STA XPOINT
 695 LDA XCOPY+1
 696 STA XPOINT+1
 697 JBR COMPAREY
 698 BEQ RETFILL ! TOP OF SCREEN REACHED
 699 JBR COPYTOBYTE
 700 JBR UPBYTEY
 701 JBR BYTETOCOPY
 702 SECONDCHECK LDA MASKCOPY
 703 STA MASKONE
 704 JBR EORMAP
 705 BEQ LOOPMASK1A
 706 RETFILL RTS
 707 !
 708 LOOPMASK1 JBR EORMAP
 709 BNE SKIPSKIP1
 710 LOOPMASK1A LDA XPOINT+1
 711 BNE DECX1
 712 LDA XPOINT
 713 BEQ LHWALL ! LEFT HAND SCREEN EDGE
 714 DECX1 JBR DOWNPOINTX
 715 ASL MASKONE
 716 BCC LOOPMASK1
 717 LEFTLOOP LDA (BYTE), Y
 718 CMP MAPTYPE
 719 BNE MASKOUT
 720 LDA XPOINT+1
 721 BNE DECX2
 722 LDA XPOINT
 723 CMP £#7
 724 BEQ LHWALL1
 725 DECX2 SEC
 726 DECX2 LDA XPOINT
 727 BSC £#08
 728 STA XPOINT
 729 BCS LEFTLOOP
 730 DEC XPOINT+1
 731 BEQ LEFTLOOP
 732 MASKOUT LDA £X00000001
 733 STA MASKONE
 734 BNE LOOPMASK1
 735 !
 736 LHWALL1 STY XPOINT
 737 LHWALL LDA (BYTE), Y
 738 CMP MAPTYPE
 739 BEQ SETWHOLEBYTE
 740 !
 741 SETBYTE1 LDA £X10000000
 742 BSC £#08
 743 STA MASKONE
 744 LOOPMASK2 JBR EORMAP
 745 BEQ SKIPSKIP
 746 JMP NEXTLINECHECK
 747 NLCSKIP LDA MASKONE
 748 SKIPSKIP JBR FLIPLINE
 749 SKIPSKIP1 JBR UPPOINTX
 750 XUP LSR MASKONE
 751 BCC LOOPMASK2
 752 !
 753 LOOPMASK2END JBR UPBYTEX
 754 BYTEUP LDA XPOINT+1
 755 BEQ CONTLOOP
 756 LDA XPOINT
 757 CMP £320-256
 758 BCS NLCSKIP
 759 CONTLOOP LDA (BYTE), Y
 760 CMP MAPTYPE
 761 BNE SETBYTE1
 762 SETBYTE1 LDA £FFF
 763 EOR MAPTYPE
 764 STA (BYTE), Y
 765 CLC
 766 LDA XPOINT

EE64	6908	768	ADC £608
EE66	BDEE93	769	STA XPOINT
EE69	70DA	770	BCC LOOPMASK2END
EE6B	EEEF93	771	INC XPOINT+1
EE6E	D0D8	772	BNE LOOPMASK2END
EE70	*****	773	!
EE70	*****	774	! CLEAR OR INVERT SCREEN
EE70	A900	775	CLEAR
EE72	2CA9FF	776	INVERT
EE75	85FF	777	BIT \$FFA9
EE77	207000	778	STA FLAG
EE7A	20F8EE	779	JSR #70
EE7D	A900	780	JSR CHECKRAMON3
EE7F	A070	781	LDA £<SCREENSTART
EE81	85C9	782	LDY £>SCREENSTART
EE83	84CA	783	STA BYTE
EE85	A919	784	STY BYTE+1
EE87	85FD	785	LDA £23
EE89	A208	786	STA RESULT
EE8B	A000	787	LOOPBK LDX £608
EE8D	A9FF	788	LOOP1K LDY £600
EE8F	24FF	789	LOOPLINE LDA £0FF
EE91	8002	790	BIT FLAG
EE93	51C9	791	BVC CLEARSCREEN
EE95	91C9	792	EOR (BYTE), Y
EE97	C8	793	CLEARSCREEN STA (BYTE), Y
EE98	C028	794	INY
EE9A	D0F1	795	CPY £40
EE9C	203DEF	796	BNE LOOPLINE
EE9F	CA	797	JSR ADD1K
EEA0	DOE9	798	DEX
EEA2	2045EF	799	BNE LOOP1K
EEA5	E904	800	JSR NOT1K
EEA7	85CA	801	SBC £604
EEA9	C6FD	802	STA BYTE+1
EEAB	D0DC	803	DEC RESULT
EEAD	60	804	BNE LOOPBK
EEAE	*****	805	RTS
EEAE	207000	806	GETINT !
EEB1	2084BD	807	JSR #70
EEB4	2051CD	808	JSR TESTTYPE
EEB7	4CEAC2	809	JSR ADJUSTACC1
EEBA	*****	810	JMP EVALPOINT
EEBA	203AEC	811	ALL3 !
EEBD	20D4EE	812	JSR NUMBERIN
EECO	BEF293	813	JUSTZ2 JSR CHECKY
EEC3	BDEE93	814	STOREPOINT STX YPOINT
EEC6	BCEF93	815	STA XPOINT
EEC9	60	816	STY XPOINT+1
EECA	*****	817	RTS
EECA	BEF193	818	STOREEND STX YEND
EECD	BDEC93	819	STA XEND
EEDO	BCED93	820	STY XEND+1
EED3	60	821	RTS
EED4	*****	822	!
EED4	E0C8	823	CHECKY CPX £200
EED6	9008	824	BCC CHECKX
EED8	A2FF	825	OUTOFRANGE LDX £255
EEDA	8696	826	ERRORExit STX STATUSWORD
EEDC	2083BB	827	JSR SCANBASIC
EEDF	A6B4	828	OKEXIT LDX STACKCOPY
EEE1	9A	829	TXB
EEE2	60	830	RTS
EEE3	*****	831	!
EEE3	A511	832	CHECKX LDA #11
EEE5	A412	833	LDY #12
EEE7	C000	834	CHECKXX2 CPY £0
EEE9	F008	835	BEQ RETURN
EEE9	C001	836	CPY £1
EEED	DOE9	837	BNE OUTOFRANGE
EEEF	C940	838	CMP £320-256
EEF1	B0E5	839	SBC OUTOFRANGE
EEF3	60	840	RETURN RTS
EEF4	*****	841	!
EEF4	A904	842	CHECKRAMON LDA £4
EEF6	85BB	843	CHECKRAMON2 STA FLAG1
EEFB	A2FE	844	CHECKRAMON3 LDX £254
EEFA	ADF393	845	LDA TESTBYTE
EEFD	49FF	846	EOR £0FF
EEFF	BDF393	847	STA TESTBYTE
EF02	CDF393	848	CMP TESTBYTE
EF05	DOD3	849	BNE ERRORExit
EF07	60	850	CHECKOK RTS
EF08	*****	851	!
EF08	18	852	ADDBYTE CLC
EF09	85C9	853	ADC BYTE
EF0B	85C9	854	STA BYTE
EF0D	6A	855	TXA
EF0E	85CA	856	ADDHIBYTE ADC BYTE+1
EF10	85CA	857	STA BYTE+1
EF12	60	858	RTS
EF13	*****	859	!
EF13	ADF293	860	CMPYEND LDA YPOINT
EF16	CDF193	861	CMP YEND
EF19	FOC4	862	BEQ OKEXIT
EF1B	60	863	RTS
EF1C	*****	864	!
EF1C	ADEF93	865	CMPXEND LDA XPOINT+1
EF1F	CDED93	866	CMP XEND+1
EF22	D008	867	BNE RETXEND
EF24	ADEE93	868	LDA XPOINT
EF27	CDEC93	869	CMP XEND
EF2A	F0B3	870	BEQ OKEXIT
EF2C	60	871	RTS
EF2D	*****	872	!
EF2D	38	873	COMPAREY SEC
EF2E	A9C7	874	LDA £199
EF30	EDF293	875	SBC YPOINT
EF33	60	876	RTS
EF34	*****	877	!
EF34	CEF293	878	DNWBYTEY DEC YPOINT

EF37 2907 879 AND EX000000111
 EF39 C907 880 CMP E807
 EF3B F008 881 BEQ NOT1K !7 TO O MOVE
 EF3D 18 882 ADD1K CLC
 EF3E A5CA 883 LDA BYTE+1
 EF40 6904 884 ADC E804
 EF42 B5CA 885 STA BYTE+1
 EF44 60 886 RTS
 EF45 38 887 NOT1K SEC
 EF46 A5C9 888 LDA BYTE
 EF48 E9D8 889 SBC E8D8 ! < ((7*1024)-40)
 EF4A B5C9 890 STA BYTE
 EF4C A5CA 891 LDA BYTE+1
 EF4E E91B 892 SBC E81B ! > ((7*1024)-40)
 EF50 B5CA 893 STA BYTE+1
 EF52 60 894 RTS
 EF53 ***** 895 !
 EEF293 896 UPBYTEY INC YPOINT
 EF56 2907 897 AND EX000000111
 EF58 F008 898 BEQ CROSSLINE2
 EF5A 38 899 SEC
 EF5B A5CA 900 LDA BYTE+1
 EF5D E904 901 SBC E84
 EF5F B5CA 902 STA BYTE+1
 EF61 60 903 RTS
 EF62 18 904 CROSSLINE2 CLC
 EF63 A5C9 905 LDA BYTE
 EF65 69D8 906 ADC E8D8
 EF67 B5C9 907 STA BYTE
 EF69 A5CA 908 LDA BYTE+1
 EF6B 691B 909 ADC E81B
 EF6D B5CA 910 STA BYTE+1
 EF6F 60 911 RTS
 EF70 ***** 912 !
 EF70 E6C9 913 UPBYTEX INC BYTE
 EF72 D002 914 BNE BYTERET
 EF74 E6CA 915 INC BYTE+1
 EF76 60 916 BYTERET RTS
 EF77 ***** 917 !
 EF77 EEEE93 918 UPPOINTX INC XPOINT
 EF7A D003 919 BNE POINTRET
 EF7C EEEEF93 920 INC XPOINT+1
 EF7F 60 921 POINTRET RTS
 EF80 ***** 922 !
 EF80 A5C9 923 DOWNBYTEX LDA BYTE
 EF82 D002 924 BNE DECBYTE
 EF84 C6CA 925 DEC BYTE+1
 EF86 C6C9 926 DECBYTE DEC BYTE
 EF88 60 927 RTS
 EF89 ***** 928 !
 EF89 ADEE93 929 DOWNPOINTX LDA XPOINT
 EF8C D003 930 BNE DECPPOINT
 EF8E CEEEF93 931 DEC XPOINT+1
 EF91 CEEE93 932 DECPPOINT DEC XPOINT
 EF94 60 933 RTS
 EF95 ***** 934 !
 EF95 A980' 935 LSRMASK LDA EX10000000
 EF97 88 936 LOOPDEC DEY
 EF98 F003 937 BEQ LSRRET
 EF9A 4A 938 LSR A
 EF9B 90FA 939 BCC LOOPDEC
 EF9D 60 940 LSRRET RTS
 EF9E ***** 941 !
 EF9E ***** 942 !
 EF9E A5C9 943 BYTETOCOPY LDA BYTE
 EFA0 B5C0 944 STA BYTECOPY
 EFA2 A5CA 945 LDA BYTE+1
 EFA4 B5C1 946 STA BYTECOPY+1
 EFA6 60 947 RTS
 EFA7 ***** 948 !
 EFA7 48 949 COPYTOBYTE PHA
 EFB8 A5C0 950 LDA BYTECOPY
 EFAA B5C9 951 STA BYTE
 EFAC A5C1 952 LDA BYTECOPY+1
 EFAE B5CA 953 STA BYTE+1
 EFB0 68 954 PLA
 EFB1 60 955 RTS
 EFB2 ***** 956 !
 EFB2 ***** 957 !
 EFB2 B1C9 958 EORMAP LDA (BYTE),Y
 EFB4 45FB 959 EOR MAPTYPE
 EFB6 24CC 960 BIT MASKONE
 EFB8 60 961 RTS
 EFB9 ***** 962 !
 EFB9 ***** 963 !
 EFB9 ***** 964 ! TABLE OF SCREEN BYTES
 EFB9 907498 965 HITABLE -BYTE \$90,\$94,\$98,\$9C
 EFB9 AOA4A8 966 -BYTE \$A0,\$A4,\$A8,\$AC
 EFC1 ***** 967 !
 EFC1 EA 968 NOP
 EFC2 EA 969 NOP
 EFC3 EA 970 NOP
 EFC4 EA 971 NOP
 EFC5 EA 972 NOP
 EFC6 EA 973 NOP
 EFC7 ***** 974 ! JUMP TABLE FOR ENTRY POINTS
 EFC7 ***** 975 !
 EFC7 4C80EF 976 DECBYTEENTRY JMP DOWNBYTEX
 EFCA ***** 977 !
 EFCA 4C70EF 978 INCBYTEENTRY JMP UPBYTEX
 EFC0 ***** 979 !
 EFC0 4C34EF 980 DOWNBYTENTRY JMP DOWNBYTEY
 EFD0 ***** 981 !
 EFD0 4C53EF 982 UPBYTENTRY JMP UPBYTEY
 EFD3 ***** 983 !
 EFD3 4C77EF 984 INCPTENTRY JMP UPPOINTX
 EFD6 ***** 985 !
 EFD6 4C89EF 986 DECPENTRY JMP DOWNPOINTX
 EFD9 ***** 987 !
 EFD9 4CC0EE 988 STOREPTENTRY JMP STOREPOINT
 EFD0 ***** 989 !

EFDC 4CCAEE	990	STORENDENTRY	JMP STOREND
EFDF *****	991	!	
EFDF 4CF4EE	992	RAMCHECKENTRY	JMP CHECKRAMON !RAM TEST ENTRY (SET FLAG1-4)
EFE2 *****	993	!	
EFE2 4C1B87	994	LATCHENTRY	JMP LATCHMASK !LATCH ENTRY POINT
EFE3 *****	995	!	
EFE5 4C72EC	996	CONTEXTENTRY	JMP CONTLINE !SINGLE TEXT CHAR ENTRY (MODI
FY Y,			
EFE8 *****	997	!	
EFE8 4C2DEF	998	COMPYENTRY	JMP COMPAREY !SEC,LDA £199,BBC YPOINT,RTS
EFE8 *****	999	!	
EFE8 4C01EA	1000	LINESENTRY	JMP START !LINES ENTRY POINT
EFE8 *****	1001	!	
EFE8 4C2CEB	1002	POINTENTRY	JMP PLOT1 !POINT ENTRY POINT
EFFF *****	1003	!	
EFF1 4C93ED	1004	MAPENTRY	JMP MAPOLDSET !MAP FILL & ERASE
EFF4 *****	1005	!	
EFF4 4C7DDE	1006	CLEARENTRY	JMP CLEARIN !CLEAR & INVERT ENTRY
EFF7 *****	1007	!	
EFF7 4CB8EB	1008	EXAMENTRY	JMP EXAMINEIN !EXAMINE ENTRY POINT
EFFA *****	1009	!	
EFFA 4C14EC	1010	STRTEXTENTRY	JMP CONTEXT !STRING TEXT ENTRY POINT
EFFD *****	1011	!	
EFFD 4C9FEC	1012	NUMTEXTENTRY	JMP BACKIN2 !NUMERIC TEXT ENTRY POINT
FOOO *****	1013	!	
FOOO *****	1014	.	END

The source listing is the 80-column version. Where the addresses of ROM routines and tables differ for other machines this is noted in the listing. The main difference is in the text routine, which is considerably different for 9 inch screen machines: the 9 inch text listing is given below. Note that the routine at \$E7E9 is not required for 9 inch machines.

'ECBB *****	557	!	9 INCH SCREEN TEXT ROUTINE
ECBB 202CEB	558	JSR PLOT1	
ECBE 84FF	559	STY FLAG	
ECC0 A900	560	LDA £0	
ECC2 A208	561	LDX £00B	
ECC4 88	562	LOOPDEC1 DEY	!SET UP MASK
ECC6 F004	563	BEQ MASK1	
ECC7 38	564	SEC	
ECC8 6A	565	ROR A	
ECC9 90F9	566	BCC LOOPDEC1	
ECCB 85CC	567	STA MASKONE	
ECCD B1C9	568	LOOPCHAR LDA (BYTE), Y	
ECCF 47FF	569	EOR £0FF	NORMAL LOGIC
ECD1 24BE	570	BIT TEXTYPE	
ECD3 1002	571	BPL STOREBYTE1	!OVERLAY OR FLIP TEXT
ECD5 25CC	572	AND MASKONE	
ECD7 85B3	573	STOREBYTE1 STA TWOBYTE+1	
ECD9 84FB	574	STY CHAR2	!SET TO 0
ECD8 84CB	575	STY MEMOFF	!SET TO 0
ECD9 2CF9A7	576	BIT CHARBLOCKSTART+1	
ECE0 100C	577	BPL GETBYTE	
ECE2 C6CB	578	DEC MEMOFF	!SET TO *FF
ECE4 AD40E8	579	RETRACE LDA £EB40	
ECE7 2920	580	AND £020	
ECE9 D0F9	581	BNE RETRACE	
ECEB 8CB888	582	STY LATCH	
ECEE B1B7	583	GETBYTE LDA (CHARPOINT), Y	
ECF0 24CB	584	BIT MEMOFF	
ECF2 100A	585	BPL EORONEBYTE	
ECF4 48	586	PHA	
ECAF AD7902	587	LDA LATCHCOPY	
ECAF 0901	588	ORA £%000000001	!ENSURE RAM ON
ECAF 8DB888	589	STA LATCH	
ECAF 48	590	PLA	
ECAF 45B1	591	EOR ONEBYTE	!INVERT FOR REVERSE FIELD
ED00 A4FF	592	LDY FLAG	
ED02 88	593	LOOPDEC2 DEY	
ED03 F00D	594	BEQ MASK2	
ED05 4A	595	LSR A	
ED06 66FB	596	ROR CHAR2	
ED08 90FB	597	BCC LOOPDEC2	
ED0A *****	598	!	
ED0A 45B3	599	FLIPTEXT1 EOR TWOBYTE+1	
ED0C 500A	600	BVC BITS	!UNCONDITIONAL
ED0E 45FB	601	FLIPTEXT2 EOR CHAR2	
ED10 5019	602	BVC INVERT2	
ED12 *****	603	!	
ED12 24BE	604	MASK2 BIT TEXTYPE	
ED14 D0F4	605	BVC FLIPTEXT1 !FLIP TEXT ONLY	
ED16 05B3	606	ORA TWOBYTE+1	
ED18 47FF	607	BITS EOR £0FF	
ED1A 91C9	608	STA (BYTE), Y	
ED1C CB	609	INY	
ED1D B1C9	610	LDA (BYTE), Y	
ED1F 24BE	611	BIT TEXTYPE	
ED21 1002	612	BPL INVERTBYTE	
ED23 05CC	613	ORA MASKONE	
ED25 49FF	614	INVERTBYTE EOR £0FF	!STRAIGHT TEXT ONLY
ED27 50E8	615	BVC FLIPTEXT2 !FLIP TEXT ONLY	
ED29 05FB	616	ORA CHAR2	
ED2B 47FF	617	INVERT2 EOR £0FF	
ED2D 91C9	618	STA (BYTE), Y	
ED2F 88	619	DEY	
ED30 CA	620	DEX	
ED31 D001	621	BNE NEXTLINE	
ED33 60	622	END1 RTS	
ED34 E6B7	623	NEXTLINE INC CHARPOINT	
ED36 D002	624	BNE SETCARRY	
ED38 E6B8	625	INC CHARPOINT+1	
ED3A 202DEF	626	JSR COMPAREY	