

GAZETTEER

NAME (DEC LOCN) [HEX LOCN] \USE-TYPE\ - DESCRIPTION

(-32K) (-7938~7932) [\$E0FE~\$E104] \P5\APPLESOFT FIVE-BYTE FLOATING POINT CONSTANT -32768 (-2¹⁶)

1002 (1002) [\$03EA] \SE\ DOS 3.2 ENTRY POINT FOR ROUTINE THAT UPDATES I/O HOOK TABLES IN \$0036~\$0039. (JMP \$A851 - SAVES ADDRESSES OF CHARACTER INPUT & OUTPUT ROUTINES CURRENTLY IN USE AND RECONNECTS DOS I/O)

(3D0G) (976) [\$03D0] \SE\ DOS 3.2 SOFT-ENTRY POINT; I.E. RE-ENTRY POINT (3D0G) FOR RE-INITIALIZATION SAVING ALL VARIABLES & DATA OF CURRENT BASIC PROGRAM (JMP \$9DBF)

995 (995) [\$03E3] \SE\ DOS 3.1~3.2 ENTRY POINT TO LOAD Y^A WITH ADDRESS OF IOBLK

A (74) [\$004A] \P1\ DOS DISK SYSTEM FORMATTER DUMMY LOCATION FOR TIMING PURPOSES AND SCRATCH. DOS WILL REPAIR IN INIT COMMAND; USER MUST REPAIR IF RWTS FORMATTER CALLED DIRECTLY

(A/S POINTERS) (80~97) [\$0050~\$0061] \PB\GENERAL PURPOSE POINTERS FOR APPLESOFT (PB)

(A/S RESVD) (10~22) [\$000A~\$0016] \PB\APPLESOFT RESERVED BLOCK IN PAGE ZERO

A1L-A1H (60~61) [\$003C~\$003D] \P2\MONITOR GENERAL USAGE SUBROUTINE PARAMETER A1. MANY USES INCLUDE SOURCE POINTER DURING MONITOR MOVE

A1PCLP (-392) [\$FE78] MONITOR & MINIASSEMBLER MEMORY LOCATION 'A1PCLP'

A1PCRTS (-385) [\$FE7F] MONITOR MEMORY LOCATION 'A1PCRTS'

A2L-A2H (62~63) [\$003E~\$003F] \P2\MONITOR GENERAL USAGE SUBROUTINE PARAMETER A2. USED IN CALLING LIST OF MANY MONITOR SUBROUTINES SUCH AS MOVE & CASSETTE ROUTINES

A3L-A3H (64~65) [\$0040~\$0041] \P1\MONITOR GENERAL USAGE SUBROUTINE PARAMETER A3. USED IN CALLING LIST OF MOST MONITOR SUBROUTINES

A4L-A4H (66~67) [\$0042~\$0043] \P2\MONITOR GENERAL USAGE SUBROUTINE PARAMETER A4. USED IN CALLING LIST OF SOME MONITOR SUBROUTINES

A5L-A5H (68~69) [\$0044~\$0045] \P2\MONITOR GENERAL USAGE SUBROUTINE PARAMETER A5. USED MOSTLY BY SINGLE-CYCLE & TRACE

ABS (FPA3S) (-5201) [\$EBAF] \SE\ APPLESOFT FP - TAKES ABSOLUTE VALUE OF NUMBER IN FAC & LEAVES RESULT IN FAC

ABSWAP (-3017) [\$F437] \SE\ TAKE ABSOLUTE VALUE OF FP1; THEN SWAP FP1 WITH FP2 (FP1=\$00F8;FP2=\$00F4) (A- X-REGS ALTERED)

"ABS" (-6326) [\$E74A] \SE\ INTEGER BASIC ENTRY TO GET ABSOLUTE VALUE OF A NUMBER

AC (80~83) [\$0050~\$0053] \P4\ 32-BIT EXTENDED ACCUMULATOR USED IN MONITOR 16-BIT MULT & DIVIDE

ACADR (-3810) [\$F11E] HI-RES GRAPHICS 2-BYTE TAPE READ SETUP

ACC (69) [\$0045] \P1\ USER A-REG SAVED HERE ON BRK TO MONITOR & DURING TRACE

ACL~ACH (80~81) [\$0050~\$0051] \P2\OLD MONITOR (NOT AUTOSTART). USED BY 16 BIT MULT & DIVIDE ROUTINES AS PSEUDO-ACCUMULATOR

ACL~ACH (206~207) [\$0CCE~\$00CF] \P2\INTEGER BASIC MAIN ACCUMULATOR

ADD (-3035) [\$F425] \SE\ ADD 3-BYTE M1 TO 3-BYTE M2 AND LEAVE RESULT IN M1 (NOT FP ADD BUT USED IN FP PKG) (A- X-REGS ALTERED)

ADD (-559) [\$FDD1] MONITOR MEMORY LOCATION 'ADD'

ADDINP (-636) [\$FD84] MONITOR MEMORY LOCATION 'ADDINP'

"ADDITION" (-6267) [\$E785] \SE\ INTEGER BASIC ENTRY POINT TO ADDITION FUNCTION

ADDON (-9832) [\$D998] \SE\ APPLESOFT - ADD Y-REG TO TXTPTR

ADVANCE (-1036) [\$FBF4] \SE\ MONITOR S/R- MOVE CURSOR RIGHT; I.E. INCREMENT (CH); COMPARE (CH) WITH (WNDWDTH) GO TO CR IF CH NOT LESS ELSE RETURN (RTS) (A-REG ALTERED)

ALLDONE (15911) [\$3E27] \SL\ DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL 'ALLDONE'

ALLDONE (-16826~16825) [\$BE46~\$BE47] DOS 3.3 - SKIP OVER SET CARRY INSTRUCTION IN 'HNDLERR'

AMPERV (1013~1015) [\$03F5~\$03F7] APPLESOFT - HOLDS JMP (JUMP) INSTRUCTION TO S/R WHICH HANDLES & COMMANDS. DEFAULT \$4C \$58 \$FF (JUMP TO \$FF58)

APPLEII (-1184) [\$FB60] \SE\ CLEAR SCREEN AND POKE 'APPLE II' INTO FIRST LINE OF TEXT BUFFER (AUTOSTART ROM ONLY) (A- Y-REGS ALTERED)

ARG (165~170) [\$00A5~\$00AA] \PB\ APPLESOFT SECONDARY FLOATING POINT ACCUMULATOR (USES 6-BYTE UNPACKED MATH PACKAGE FORMAT DESCRIBED BELOW)

ARGEXP (165) [\$00A5] \P1\ EXPONENT PART OF ARG. SINGLE BYTE SIGNED NUMBER IN EXCESS \$80 FORM (SIGNED VALUE HAS \$80 ADDED TO IT)

ARYTAB (107~108) [\$006B~\$006C] \P2\APPLESOFT ARRAY TABLE POINTER (POINTS TO BEGINNING OF ARRAY SPACE)

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"ASC"    (-3299) [$F31D] \SE\      INTEGER BASIC ENTRY TO ROUTINE TO PERFORM THE ASC (ASCII) FUNCTION
ATN      (-3938) [$F09E] \SE\      APPLESOFT FP COMPUTE THE ARCTANGENT OF NUMBER IN FAC. RESULT TO FAC. MODIFIES INDEX
                                      XORFPSGN AND MANY OTHER FP LOCNS
AUTOINCL~AUTOINCH (244~245) [$00F4~$00F5] \P2\ INTEGER BASIC MEMORY LOCATIONS 'AUTOINCL~AUTOINCH' (CURRENT AUTO LINE
                                      NUMBER VALUE)
AUTOLNL~AUTOLNH (246~247) [$00F6~$00F7] \P2\ INTEGER BASIC MEMORY LOCATIONS 'AUTOLNL~AUTOLNH'
AUTOMODE (248) [$00F8] \P1\      INTEGER BASIC MEMORY LOCATION 'AUTOMODE' (THE AUTOMODE FLAG)
(AUTOSTART RESVD) (32~79) [$0020~$004F] \PB\ AUTOSTART MONITOR RESERVED LOCATIONS
"AUTO"    (-6174) [$E7E2] \SE\      INTEGER BASIC ENTRY TO AUTO LINE NUMBERING FUNCTION
AUXL~AUXH (84~85) [$0054~$0055] \P2\ OLD MONITOR (NOT AUTOSTART) - USED FOR 16-BIT MULT & DIVIDE AS AUXILIARY
                                      REGISTER
AUXL~AUXH (218~219) [$00DA~$00DB] \P2\ INTEGER BASIC MEMORY LOCATIONS 'AUXL~AUXH' (AUXILIARY COUNTER)
AYINT (FP=>INT) (-7924) [$E10C] \SE\ APPLESOFT - IF FAC SUITABLE FOR CONVERSION TO INTEGER (FAC<32767 & FAC>-32768)
                                      THEN PERFORM QINT (RESET Y-REG=0)
(AYPOSINT +FP=>INT) (-7928) [$E108] \SE\ APPLESOFT - SAME AS AYINT ($E10C) EXCEPT FAC MUST BE POSITIVE
(BAD SUBSCRPT) (-7786) [$E196] \SE\ APPLESOFT - PRINT "BAD SUBSCRIPT" AND HALT AT APPLESOFT LEVEL (J)
BAS2L~BAS2H (42~43) [$002A~$002B] \P2\ USED DURING SCROLLING AS DESTINATION LINE POINTER AS EACH LINE IS MOVED TO
                                      POSITION ABOVE CURRENT
BASCALC (-1087) [$FBC1] \SE\      MONITOR S/R- CALCULATE TEXT BASE ADDRESS. SET BASL~H TO LEFT END OF SCREEN LINE
                                      (NOT WINDOW LINE) IN A-REG (A-REG ALTERED)
BASCONT (-333) [$FEB3] \SE\      MONITOR S/R TO CONTINUE BASIC
BASIC (-8192) [$E000]             APPLESOFT - 'HARD' OR 'COLD' OR 'CONTROL-B' ENTRY POINT (COMPLETE
                                      REINITIALIZATION. START WITH A TOTALLY FRESH SLATE.)
BASIC (-8192) [$E000]             INTEGER BASIC - 'HARD' OR 'COLD' OR 'CONTROL-B' ENTRY POINT (COMPLETE
                                      REINITIALIZATION. START WITH A TOTALLY FRESH SLATE)
BASIC2 (-8189) [$E003] \SE\      INTEGER BASIC - 'SOFT' OR 'WARM' OR 'CONTROL-C' OR 'ENTRY2' ENTRY POINT
                                      (REENTRY WITHOUT REINITIALIZATION OF SYMBOL-TABLE VARIABLES OR DATA)
BASL~BASH (40~41) [$0028~$0029] \P2\ MEMORY ADDRESS FOR LEFT END CHARACTER POS'N OF CURRENT TEXT LINE
BCKSPC (-655) [$FD71]             MONITOR MEMORY LOCATION 'BCKSPC'
BDRAW (-11462) [$D33A] \SE\      HI-RES GRAPHICS DRAW1 S/R CALL: PARAM=X0~Y0~COLR~SHAPE~ROT~SCALE
BDRAW1 (-11465) [$D337] \SE\      HI-RES GRAPHICS LINE S/R CALL: PARAM=X0~Y0~COLR
BELL (-198) [$FF3A] \SE\          MONITOR S/R TO SOUND BELL IN CURRENT OUTPUT DEVICE (WHETHER IT IS APPLE OR
                                      EXTERNAL PRINTER) (A--REG ALTERED)
BELL1 (-1063) [$FBD9]             MONITOR MEMORY LOCATION 'BELL1'
BELL2 (-1052) [$FBE4] \SE\      MONITOR S/R- SOUND BELL (BEEPER)
BGND (-11471) [$D331] \SE\      HI-RES GRAPHICS BKGND S/R CALL PARAM= COLR
BKGND (-12270) [$D012] \P1\      HI-RES GRAPHICS MEMORY LOCATION 'BKGND' (ROM)
BKGND (-3086) [$F3F2] \SE\      APPLESOFT HI-RES - CLEAR HI-RES SCREEN TO LAST PLOTTED COLOR
BKGND0 (-12272) [$D010]          HI-RES GRAPHICS 'BKGND0 (HCOLOR1 SET FOR BLACK BKGND)
BL1 (-512) [$FE00]               MONITOR & MINIASSEMBLER MEMORY LOCATION 'BL1'
BLANK (-508) [$FE04]             MONITOR MEMORY LOCATION 'BLANK'
BLIN1 (-11500) [$D314] \SE\      HI-RES GRAPHICS LINE S/R CALL PARAM= X0~Y0~COLR
BLTU (-11373) [$D393] \SE\      APPLESOFT BLOCK TRANSFER UTILITY. MAKES ROOM BY MOVING EVERYTHING FORWARD.
                                      Y-REG(MSB)&A-REG(LSB) AND HIGHDS=DEST OF HIGH ADR;LOWTR=LOWEST ADDR TO BE
                                      MOVED;HIGHTR=HIGHEST ADDR TO BE MOVED+1
(BOOT DISK #) (1528) [$05F8] \P1\ CONTAINS SLOT # OF DISK CONTROLLER CARD FROM WHICH ANY ACTIVE DOS 3.2 WAS BOOTED
BPL0T (-11506) [$D30E] \SE\      HI-RES GRAPHICS PLOT S/R CALL PARAM= X0~Y0~COLR
BPOSN (-11527) [$D2F9] \SE\      HI-RES GRAPHICS POSN S/R CALL PARAM= X0~Y0~COLR
BRANCH (-1283) [$FAFD]           MONITOR MEMORY LOCATION 'BRANCH'
"BRANCH" (-6420) [$E6EC] \SE\      INTEGER BASIC ENTRY POINT TO BRANCH (GET L0/HI THEN JSR)
BRATE (1144+S) [$0478+S] \P1\      EXAMPLE: SERIAL INTERFACE BAUD QUANTUM RATE. $1= 19200 BAUD;$40=300 BAUD

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BREAK    (-1390) [$FA92] \SE\      MONITOR S/R - BREAK HANDLER
BRKV     (1008~1009) [$03F0~$03F1] \P2\ AUTOSTART ROM BREAK VECTOR - DEFAULT VALUE $FA59
BS       (-1008) [$FC10] \SE\      MONITOR S/R TO MOVE CURSOR LEFT (BACKSPACE); IF AT START OF LINE MOVE UP TO
                                      RIGHT END OF LINE ABOVE IF POSSIBLE (A-REG ALTERED)
BSCLC2   (-1072) [$FBD0]          MONITOR MEMORY LOCATION 'BSCLC2'
BUF INBUF (-512~767) [$0200~$02FF] \HB\ KEYIN (CHARACTER INPUT) BUFFER (MONITOR~INTEGER BASIC~APPLESOFT BASIC)
BUFPTR   (62~63) [$003E~$003F] \P2\ DOS RWTS (READ-WRITE TRACK-SECTOR) PARAMETER 'BUFPTR' (POINTS TO DATA BUFFER IN
                                      RWTS)
BXSAV    (803) [$0323]          HI-RES GRAPHICS 'BXSAV'
BYTE     (1656+S) [$0678+S]     EXAMPLE: APPLE SERIAL INTERFACE IN SLOT #S INPUT OUTPUT BUFFER
~CALL~   (-4448) [$EEA0] \SE\    INTEGER BASIC ENTRY POINT TO CALL A SUB/ROT FUNCTION
CANCEL   (-670) [$FD62] \SE\    MONITOR S/R TO PERFORM A LINE CANCEL (\)
CAPTST   (-642) [$FD7E]          MONITOR MEMORY LOCATION 'CAPTST'
CAT      (-6761) [$E597] \SE\    APPLESOFT - CONCATENATE TWO STRINGS. FACMO (MSB) & FACLO (LSB) POINT TO FIRST
                                      STRING'S DESCRIPTOR & TXTPTR POINTS TO '+'
CH        (36) [$0024] \P1\      CURSOR HORIZONTAL DISPLACEMENT FROM WNDLFT: RANGE 0 TO (WNDWDTH)-1
CHAR     (249) [$0CF9] \P1\      INTEGER BASIC MEMORY LOCATION 'CHAR' (CURRENT CHARACTER)
CHAR1    (-1612) [$F9B4]          MONITOR & MINIASSEMBLER MEMORY LOCATION 'CHAR1'
CHAR2    (-1606) [$F9BA]          MONITOR & MINIASSEMBLER MEMORY LOCATION 'CHAR2'
CHARAC   (13) [$000D]          APPLESOFT - USED BY STRLT2 STRING UTILITY
CHGIT    (16326) [$3FC6] \SL\    DOS 3.2 DISK FORMATTER INTERIOR LABEL 'CHGIT'
CHKCLS   (-8520) [$DEB8] \SE\    APPLESOFT CLOSE PARENTHESIS CHECK - CHECKS TXTPTR FOR ')'. USES SYNCHR.
CHKCOM   (-8514) [$DEBE] \SE\    APPLESOFT COMMA CHECK - CHECKS TXTPTR FOR COMMA. USES SYNCHR.
CHKNUM   (-8854) [$DD6A] \SE\    APPLESOFT - MAKE SURE FAC IS NUMERIC (SEE CHKVAL)
CHKOPN   (-8517) [$DEBB] \SE\    APPLESOFT OPEN PARENTHESIS CHECK - CHECKS TXTPTR FOR '('. USES SYNCHR.
CHKSTR   (-8852) [$DD6C] \SE\    APPLESOFT - MAKE SURE FAC IS STRING (SEE CHKVAL)
CHKSUM   (46) [$002E] \P1\      LOCN WHERE CHECKSUM IS ACCUMULATED DURING CASSETTE TAPE READ
CHKVAL   (-8851) [$DD6D] \SE\    APPLESOFT - IF C SET CHECK FOR STRINGS; C CLEAR CHECK FOR NUMRIC VBL. TYPE
                                      MISMATCH ERROR OCCURS IF C AND FAC DON'T AGREE
CHRGET   (177) [$00B1] \SE\      APPLESOFT CHRGET S/R CALL - GETS NEXT SEQUENTIAL CHR OR TOKEN - LOADS A-REG
                                      FROM LOCN SPECIFIED BY TXTPTR($00B8~$00B9 & INCREMENTS TXTPTR. CARRY IS RESET
                                      TO ZERO IF CHARACTER IS A DIGIT OTHERWISE IT IS SET; ZERO FLAG SET IF CHAR =0
                                      (END OF LINE SIGN) OR $3A (END OF STATEMENT SIGN ':') OTHERWISE RESET (X-
                                      Y-REGS NOT ALTERED)
CHRGET   (177~200) [$00B1~$00C8] \S9\ APPLESOFT CHRGET ROUTINE. CALLED WHEN WANTS ANOTHER CHARACTER (X- Y-REGS NOT
                                      ALTERED)
CHRGOT   (183) [$00B7] \SE\      APPLESOFT CHRGOT S/R CALL. CHRGOT INCREMENTS TXTPTR. CHRGOT DOES NOT
CHRSRCH  (-134) [$FF7A]          MONITOR MEMORY LOCATION 'CHRSRCH'
CHRTBL   (-52) [$FFCC]          MONITOR & MINIASSEMBLER MEMORY LOCATION 'CHRTBL' (TABLE USED TO DECODE MONITOR
                                      KEYBOARD INPUT)
CIN      (-22120~22119) [$A998~$A999] \P2\ DOS 3.1 INTERNAL HOOK ENTRY ADDRESS TO INPUT A CHARACTER
CLEARC   (-10644) [$D66C] \SE\    APPLESOFT INITIALIZATION - THE 'CLEAR' COMMAND. CLEARS VARIABLES & STACK
CLEOL2   (-864) [$FCA0]          MONITOR MEMORY LOCATION 'CLEOL2'
CLEOLZ   (-866) [$FC9E]          MONITOR MEMORY LOCATION 'CLEOLZ'
CLEOP1   (-954) [$FC46]          MONITOR MEMORY LOCATION 'CLEOP1'
CLRAND   (-16295) [$C059] \FF\    VALUE <>0 WHEN GAME AND IS RESET (CLEARED). POKE 0 TO SET GAME I/O OUTPUT AND
                                      (0.3V AT PIN 15)
CLRAN1   (-16293) [$C05B] \FF\    POKE 0 TO SET GAME I/O OUTPUT AN1 (0.3V AT PIN 14)
CLRAN2   (-16291) [$C05D] \FF\    POKE 0 TO SET GAME I/O OUTPUT AN2 (0.3V AT PIN 13)
CLRAN3   (-16289) [$C05F] \FF\    POKE 0 TO SET GAME I/O OUTPUT AN3 0.3V AT PIN 12)
CLREOL   (-868) [$FC9C] \SE\      MONITOR S/R TO CLEAR TO END OF LINE (A- Y-REGS ALTERED)

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CLREOP	(-958) [\$FC42] \SE\	MONITOR S/R TO CLEAR FROM CURSOR TO END OF PAGE. (A- Y-REGS ALTERED)
CLRROM	(-12289) [\$CFFF] \H1\	SPECIAL LOCATION RECOGNIZED BY PERIPHERAL CARDS AS SIGNAL TO TURN OFF FLIP FLOPS WHICH DISABLE EXPANSION ROM
CLRSC2	(-1992) [\$F838] \SE\	CLEAR LINES 0 THRU (Y-REG) 40 COLUMNS WIDE TO BLACK IN LO-RES GRAPHICS OR INVERSE @ IN TEXT PAGE 1 (A- Y-REGS ALTERED)
CLRSC3	(-1988) [\$F83C] \SE\	CLEAR LO-RES GRAPHICS PARTIAL TOP LEFT: X-COORD 0 THRU (Y-REG); Y-COORD 0 THRU (\$002D) (A- Y-REGS ALTERED)
CLRSCR	(-1998) [\$F832] \SE\	CLEAR LO-RES GRAPHICS SCREEN1 TO BLACK (INVERSE @ IN TEXT MODE) MIXED GRAPHICS AREA ONLY (A- Y-REGS ALTERED)
CLRSCR	(-1998) [\$F832] \SE\	MONITOR S/R TO CLEAR SCREEN - GRAPHICS MODE FULL SCREEN) (A- Y-REGS ALTERED)
CLRTOP	(-1994) [\$F836] \SE\	CLEAR TOP 20 LINES PAGE1 TO INVERSE @ IN TEXT; BLACK IN LO-RES GRAPHICS (40 LO-RES GRAPHIC 'LINES') (A- Y-REGS ALTERED)
"CLR"	(-6729) [\$E5B7] \SE\	INTEGER BASIC ENTRY POINT TO CLEAR OUT VARIABLE WORK SPACE
CNUM	(68~69) [\$0044~\$0045]	DOS - POINTS TO AVAILABLE BUFFER IN OPEN. ALSO USED AS ARITHMETIC REGISTER BY DOS FIRST & SECOND LEVEL ROUTINES
COLLSN	(810) [\$032A] \P1\	COLLISION COUNT FROM DRAW~DRAW1
COLOR	(48) [\$0C3C] \P1\	LOW-RES COLOR GRAPHICS COLOR CODE (FOR PLOT/HLIN/VLIN FUNCTIONS) - CONTAINS SELECTED COLOR VALUES FOR TWO LOW-RES GRAPHICS 'LINES' ONE IN EACH NIBBLE OF BYTE
"COLOR"	(-4530) [\$EE4E] \SE\	INTEGER BASIC ENTRY TO ROUTINE TO SET COLOR VALUE FOR LO-RES
COMBYTE	(-6324) [\$E74C] \SE\	APPLESOFT - CHECK FOR COMMA & GET A BYTE IN X-REG. USES CHKCOM& BETBYT. ON ENTRY TXTPTR POINTS TO COMMA
(COMMAND TBL)	(26756) [\$6884] \PB\	DOS 3.2 COMMAND TABLE (32K APPLE ONLY!)
"COMMA"	(-6207) [\$E7C1] \SE\	INTEGER BASIC ENTRY POINT TO COMMA FUNCTION
(COMPTYP)	(22) [\$0016] \P1\	APPLESOFT - PARAMETER TO CONTROL TYPE OF COMPARISON MADE BY FLOATING POINT COMPARISON ROUTINE AT \$DF6A (1:> ;2:= ;3:>= ;4:< ;5:<= ;6:<=)
CONINT	(-6405) [\$E6FB] \SE\	APPLESOFT FP - CONVERT FAC INTO SINGLE BYTE IN X-REG & FACLO.NORMAL EXIT THRU CHRGET. IF FAC<0 OR FAC>255 ILLEGAL QUANT ERROR
CONL~CONH	(242~243) [\$00F2~\$00F3] \P2\	INTEGER BASIC MEMORY LOCATIONS 'CONL~CONH' (CONTINUE POINTER)
CONSYNC	(16074) [\$3ECA] \SL\	DOS 3.2 DISK FORMATTER - LABEL AT POINT WHERE CONSTRUCTION OF SYNC BEGINS
CONT	(-10088) [\$D898] \SE\	APPLESOFT - MOVES OLDTXT & OLDLIN INTO TXTPTR & CURLIN
CONUPK	(-5661) [\$E9E3] \SE\	APPLESOFT FP - LOAD ARG FROM MEMORY POINTED TO BY Y-REG & A-REG. ON EXIT A & Z REFLECT FACEXP. MODIFIES INDEX & XORFPSGN. (RESET Y-REG=0)
CONWAIT	(15743) [\$3D7F] \SL\	DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR INTERIOR LABEL - STARTS CONSTANT WAIT DELAY LOOP RETURN POINT
"CON"	(-3318) [\$F30A] \SE\	INTEGER BASIC ENTRY TO ROUTINE TO CONTINUE EXECUTION
COPY	(-9545) [\$DAB7] \SE\	APPLESOFT - FREE STRING POINTED TO BY Y-REG (MSB) & A-REG (LSB) & MOVE IT TO MEM LOC POINTED TO BY FORPNT
CORRECTSECT	(15895) [\$3E17] \SL\	DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL AT START OF CODE WHICH ASSUME SECTOR CORRECTLY CHOSEN AND JUMPS TO APPROPRIATE SUBROUTINE TO READ OR WRITE
CORRECTVOL	(15878) [\$3E06] \SL\	DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL WHICH ASSUMES CORRECT VOLUME HAS BEEN DETECTED AND CHECKS FOR SECTOR SELECTION
COS	(-4118) [\$EFEA] \SE\	APPLESOFT FP - COMPUTE THE COSINE OF THE NUMBER IN FAC. RESULT TO FAC. MODIFIES INDEX CHARAC COMPTYP XORFPSGN AND MANY OTHER FP LOCNS
COUNT - CSUM	(44) [\$002C] \P1\	DOS RWTS (READ-WRITE TRACK-SECTOR) PARAMETER (RETURNS CHECKSUM)
COUNT	(249) [\$00F9] \P1\	INTEGER BASIC MEMORY LOCATION 'COUNT'
COUNTH	(29) [\$001D] \P1\	HI-RES GRAPHICS HIGH-ORDER BYTE OF STEP COUNT FOR LINE
COUT	(-22122~-22121) [\$A996~\$A997] \P2\	DOS 3.1 INTERNAL HOOK ENTRY ADDRESS TO OUTPUT A CHARACTER
COUT	(-531) [\$FDED] \SE\	PRINT BYTE IN A-REG TO OUTPUT DEVICE SPECIFIED BY 'CSWL' (NORMALLY 'COUT1') (A-REG ALTERED)
COUT1	(-528) [\$FDF0] \SE\	WRITE BYTE IN A-REG TO SCREEN AT CURSOR POSN (CV)~(CH) USING 'INVFLG' & SUPPORTING CURSOR MOVE

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COUTZ (-522) [\$FDF6] \SE\ WRITE BYTE FROM A-REG TO SCREEN AT (CV)^(CH) WITH CURSOR MOVE BUT NOT 'INVFLG' (NONE ALTERED)

CR (-926) [\$FC62] \SE\ MONITOR S/R TO PERFORM A CARRIAGE RETURN; I.E. LOAD ZERO TO A-REG & CH (A-REG ALTERED)

CRCTVOL (-16858-16827) [\$BE26-\$BE45] DOS 3.3 - CHECK TO SEE IF SECTOR CORRECT. USE 'ILEAV' TABLE (\$BFB8) FOR SOFTWARE SECTOR INTERLEAVING. IF WRONG SECTOR TRY AGAIN AT 'TRYADR (\$BDC1)'. IF WRITE BRANCH TO 'WRIT' (\$BES1). OTHERWISE GOTO 'READ16' (\$B8DC). IF GOOD READ CALL 'POSTNB16' (\$B8C2) AND RETURN TO CALLER WITH NO ERROR

CRDO (-9477) [\$DAFB] \SE\ APPLESOFT - PRINT A CARRIAGE RETURN

CRFLAG (213) [\$0CD5] \P1\ INTEGER BASIC MEMORY LOCATION 'CRFLAG' (CARRIAGE RETURN FLAG)

CRMON (-266) [\$FEF6] MONITOR MEMORY LOCATION 'CRMON'

CROUT (-626) [\$FD8E] \SE\ MONITOR S/R TO PRINT A CARRIAGE RETURN THROUGH COUT (A- Y-REGS ALTERED)

CSWL-CSWH (54-55) [\$0C36-\$0037] \P2\ MONITOR OUTPUT REG & OUTPUT HOOK TO DOS; I.E. ADDRESS OF ROUTINE WHICH IS TO RECEIVE AND DISPOSE OF OUTPUT CHARACTERS. RESET 0 CTRL-P & PR#0 SET THIS LOCN TO \$FDF0 (MONITOR OUTPUT TO SCREEN); S CTRL-P & PR#S SET THIS LOCN TO \$CS00 (SLOT S ROM)

CURLIN (117-118) [\$0075-\$0076] \P2\ APPLESOFT - LINE # OF LINE CURRENTLY BEING EXECUTED NOTE: HI BYTE OF CURLIN TESTED BY DOS FOR DIRECT-DEFERRED MODE USAGE - BYTE SET TO \$FF IN DIRECT. IF CONTENTS OF \$AAB6<>0 AND IF PROMPT='J' OR IF THIS LOCN CONTAINS \$FF DOS ASSUMES DIRECT MODE AND WILL NOT DO OPEN OR OTHER DIRECT MODE COMMANDS

CURTRK (1144) [\$0478] \P1\ DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) PARAMETER CURRENT TRACK (LAST TRACK 'SEEK'-ED)

CV (37) [\$0025] \P1\ CURSOR VERTICAL POSITION RELATIVE TO TOP OF SCREEN: RANGE 0-23 (\$0-\$17)

DATA (-9835) [\$D995] \SE\ APPLESOFT - MOVE TXTPTR TO END OF STATEMENT; LOOKS FOR ':' OR EOL(0).

DATAN (-9821) [\$D9A3] \SE\ APPLESOFT - CALCULATE OFFSET IN Y-REG FROM TXTPTR TO NEXT ':' OR EOL(0)

DATAOUT (-586) [\$FDB6] MONITOR MEMORY LOCATION 'DATAOUT'

DATLIN (123-124) [\$007B-\$007C] \P2\ APPLESOFT CURRENT LINE # FROM WHICH DATA IS BEING READ

DATPTR (125-126) [\$007D-\$007E] \P2\ POINTS TO ABS LOC IN MEM FROM WHICH DATA IS BEING READ BY APPLESOFT

"DELETE" (-7313) [\$E36F] \SE\ INTEGER BASIC ENTRY POINT TO DELETE LINES OF TEXT X^Y

DELL-DELH (226-227) [\$00E2-\$00E3] \P2\ INTEGER BASIC MEMORY LOCATIONS 'DELL-DELH' (DELETE LINE POINTER)

(DEV SELECT 0) (-16256-16241) [\$C080-\$C08F] 16 MEMORY LOCNS ALLOCATED TO USE OF PERIPHERAL DEVICE IN SLOT #0. WHEN ADDRESSED PIN 41 TELLS DEVICE IT IS SELECTED. SINCE SLOT #0 IS COMMON AREA USED IN COMMON FOR PARAMETERS OF INTEREST TO ALL SLOTS

(DEV SELECT 1) (-16240-16225) [\$C090-\$C09F] 16 MEMORY LOCATIONS ALLOCATED TO USE OF PERIPHERAL DEVICE IN SLOT #1. WHEN ADDRESSED PIN 41 TELLS DEVICE IT IS SELECTED

(DEV SELECT 2) (-16224-16209) [\$C0A0-\$C0AF] 16 MEMORY LOCATIONS ALLOCATED TO USE OF PERIPHERAL DEVICE IN SLOT #2. WHEN ADDRESS PIN 41 TELLS DEVICE IT IS SELECTED

(DEV SELECT 3) (-16208-16193) [\$C0B0-\$C0BF] 16 MEMORY LOCATIONS ALLOCATED TO USE OF PERIPHERAL DEVICE IN SLOT #3. WHEN ADDRESSED PIN 41 TELLS DEVICE IT IS SELECTED

(DEV SELECT 4) (-16192-16177) [\$C0C0-\$C0CF] 16 MEMORY LOCATIONS ALLOCATED TO USE OF PERIPHERAL DEVICE IN SLOT #4. WHEN ADDRESS PIN 41 TELLS DEVICE IT IS SELECTED

(DEV SELECT 5) (-16176-16161) [\$C0D0-\$C0DF] 16 MEMORY LOCATIONS ALLOCATED TO USE OF PERIPHERAL DEVICE IN SLOT #5. WHEN ADDRESSED PIN 41 TELLS DEVICE IT IS SELECTED

(DEV SELECT 6) (-16160-16145) [\$C0E0-\$C0EF] 16 MEMORY LOCATIONS ALLOCATED TO USE OF PERIPHERAL DEVICE IN SLOT #6. WHEN ADDRESSED PIN 41 TELLS DEVICE IT IS SELECTED

(DEV SELECT 7) (-16144-16129) [\$C0F0-\$C0FF] 16 MEMORY LOCATIONS ALLOCATED TO USE OF PERIPHERAL DEVICE IN SLOT #7. WHEN ADDRESS PIN 41 TELLS DEVICE IT IS SELECTED

DEVCTBL (60-61) [\$003C-\$003D] \P2\ DOS RWTS DEVICE IN READ-WRITE TRACK-SECTOR PARAMETER POINTING TO DEVICE TABLE. PRESET TO 'PTRSDEST' = POINTER TO DESTINATION DEVICE IN DEVICE TABLE. NOT A SYNONYM FOR BUFPTR

DEVCTBL (60-61) [\$003C-\$003D] DOS RWTS (READ-WRITE TRACK-SECTOR) DEVICE TABLE - SYNONYM FOR BUFPTR

DIG (-118) [\$FF8A] MONITOR MEMORY LOCATION 'DIG'

"DIMSTR"	(-7888) [\$E130] \SE\	INTEGER BASIC ENTRY POINT TO DIMENSION A STRING FOR MEMORY
"DIMVARB"	(-4322) [\$EF1E] \SE\	INTEGER BASIC ENTRY TO ROUTINE TO DIMENSION A VARIABLE
DISKID	(-1275) [\$FB05]	AUTOSTART MONITOR MEMORY LOCATION 'DISKID'
DIV	(-1148) [\$FB84] \SE\	MONITOR S/R- UNSIGNED DIVIDE ROUTINE - SAME AS \$FB81 (DIVPM) EXCEPT NO SIGNS USED.
DIV10	(-5547) [\$EA55] \SE\	APPLESOFT FP - DIVIDE FAC BY 10. RETURNS POSITIVE NUMBERS ONLY
DIV2	(-1146) [\$FB86]	MONITOR MEMORY LOCATION 'DIV2'
DIV3	(-1120) [\$FBA0]	MONITOR MEMORY LOCATION 'DIV3'
"DIVIDE"	(-4336) [\$EF10] \SE\	INTEGER BASIC ENTRY TO DIVIDE FUNCTION
DIVPM	(-1151) [\$FB81]	MONITOR SIGNED DIVISION - DIVIDES NUMBER IN EXTENDED AC (\$0050-\$0053) BY NUMBER IN AUXL-AUXH (\$0054-\$0055) LEAVING QUOTIENT IN ACL-ACH (\$0050-\$0051) AND REMAINDER IN \$0053. BE CAREFUL OF SIGNS SCALING & OVERFLOW. IF (XTNDL-XTNDH (\$0052-\$0053)) > (AUXL-AUXH (\$0054-\$0055)) OVERFLOW WILL RESULT
(DIVZEROPRT)	(-5407) [\$EAE1] \SE\	APPLESOFT - PRINT "DIVISION BY ZERO" THEN HALT AT APPLESOFT (J) LEVEL
DONEDSK	(16312) [\$3FB8] \SL\	DOS 3.2 DISK FORMATTER INTERIOR LABEL AT POINT WHERE DISK IS COMPLETED AND NO ERRORS HAVE BEEN DETECTED
(DOS 3.1 COMMAND TBL)	(-22560-\$22429) [\$A7E0-\$A863] \PB\	DOS 3.1 COMMAND TABLE (DOS 3.1 - 48K APPLE ONLY!)
(DOS 3.1 ERROR MSGS)	(-22323-\$22144) [\$A8CD-\$A980] \PB\	DOS 3.1 ERROR MSG TABLE (DOS 3.1 - 48K APPLE ONLY!)
(DOS 3.2 ERR MSGS)	(26996) [\$6974] \PB\	DOS 3.2 ERROR MESSAGES (32K APPLE ONLY!)
(DOS 3.2/3.3 COMMAND TBL)	(L)\$A884-\$A908] \PB\	DOS 3.2 (48K) COMMAND NAME TABLE OF DOS COMMAND DECODER (TABLE-DRIVEN COMMAND PARSER). CONTAINS NAMES OF DOS COMMANDS WITH LAST BYTE OF EACH NAME HAVING HIGH (7TH) BIT SET; OTHER BYTES HAVE IT CLEAR. THIS PERMITS CLOSE PACKING FOR SEQUENTIAL SEARCH. EOT IS \$00 BYTE
(DOS 3.2/3.3 ERROR MSGS)	(L)\$A971-\$AA3E] \PB\	DOS 3.2/3.3 ERROR MESSAGES (DOS 3.2/3.3 - 48K APPLE ONLY!)
DRAW	(-2559) [\$F601] \SE\	APPLESOFT HI-RES - DRAW SHAPE POINTED TO BY Y-REG(MSB)&X-REG(LSB) BY INVERTING EXISTING COLOR OF DOTS THE SHAPE DRAWS OVER. A-REG=ROTATION FACTOR
DRIVENO	(53) [\$0035] \P1\	DOS DISK DRIVE NO
DRIVERR	(16307) [\$3FB3] \SL\	DOS 3.2 DISK FORMATTER INTERIOR LABEL AT BEGINNING OF CLEANUP IF DRIVE ERROR IS DETECTED
DRVOEN	(-16246) [\$C08A] \P1\	DOS 3.2 READ\WRITE TRACK-SECTOR (RWTS) PACKAGE PARAMETER 'DRVOEN' (DRIVE 0 ENABLE)
DRV1EN	(-16245) [\$C08B] \P1\	DOS 3.2 READ\WRITE TRACK-SECTOR (RWTS) PACKAGE PARAMETER 'DRV1EN' (DRIVE 1 ENABLE)
DRV1TRK	(1272+S) [\$04F8+S] \P1\	EXAMPLE: 'DRV1TRK' = DISK DRIVE 1 CURRENT TRACK (VALUE = 2*TRACK#);
DRVERR	(15838) [\$3DDE] \SL\	DOS 3.2 PARAMETER FOR DISK IN SLOT #S
DRVERR	(-16892-\$16886) [\$BE04-\$BE0A] \SE\	DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL - STARTS CODE FOR CLEANUP WHEN DRIVE ERROR DETECTED
DRVSEL	(15719) [\$3D67] \SL\	DOS 3.3 - CLEAN UP STACK & STATUS REG; LOAD A-REG WITH \$40 (DRIVE ERROR) AND GOTO 'HNDLERR' (\$BE48)
DSCTMP	(157-159) [\$009D-\$009F] \P3\	DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL
DSKF2	(16043) [\$3EAB] \SL\	APPLESOFT TEMPORARY STRING DESCRIPTOR (SEE VALTYP & TEMPPT)
DSKFORM	(16028) [\$3E9C] \SE\	DOS 3.2 DISK FORMATTER LABEL AT POINT WHERE MOTOR IS RUNNING AND ON TRACK 0. BEGINS CODE WHICH FORMATS THIS TRACK
DSKFORM	(16028-\$16089) [\$3E9C-\$3ED9] \SB\	DOS 3.2 DISK FORMATTER ENTRY POINT - TURN MOTOR ON & FILL TRACK WITH SYNC
DSKFORM	(16028-\$16340) [\$3E9C-\$3FD4] \SB\	DOS 3.2 DISK FORMATTER MODULE TO FILL TRACK WITH SYNC
DSKFORM	(-16721-\$16628) [\$BEAF-\$BFOC] \SB\	DOS 3.2 DISK FORMATTER PACKAGE
"DSP"	(-3324) [\$F304] \SE\	DOS 3.3 - INIT COMMAND HANDLER
DVOTRK	(1144+S) [\$0478+S] \P1\	INTEGER BASIC ENTRY TO ROUTINE TO DISPLAY A VARIABLE SET
		EXAMPLE: 'DRVOTRAK' = DISK DRIVE 0 CURRENT TRACK (VALUE = 2*TRACK#);
		DOS 3.2 PARAMETER FOR DISK IN SLOT #S

NAME (DEC LOCN) [HEX LOCN] \USE-TYPE\ - DESCRIPTION

DXL~DXH (80~81) [\$0050~\$0051] \P2\	HI-RES GRAPHICS DELTA-X FOR HLIN SHAPE
DY (82) [\$0052] \P1\	HI-RES GRAPHICS DELTA-Y FOR HLIN SHAPE
E (252~254) [\$00FC~\$00FE] \P3\	MONITOR & FLOATING POINT ROUTINES MEMORY LOC 'E' (3 BYTE MANTISSA EXTENTION OF FP ACCUMULATOR 1)
EL~EH (84~85) [\$0054~\$0055] \P2\	HI-RES GRAPHICS ERROR FOR HLIN
ENDCHR (14) [\$00CE]	APPLESOFT - USED BY STRLT2 STRING UTILITY
ERR (-2682) [\$F586]	MINIASSEMBLER MEMORY LOCATION 'ERR'
ERR (-1883) [\$F8A5]	MONITOR MEMORY LOCATION 'ERR'
ERR2 (-2680) [\$F588]	MINIASSEMBLER MEMORY LOCATION 'ERR2'
ERR3 (-2791) [\$F519]	MINIASSEMBLER MEMORY LOCATION 'ERR3'
ERR4 (-2639) [\$F5B1]	MINIASSEMBLER MEMORY LOCATION 'ERR4'
ERRDIR (-7418) [\$E306] \SE\	APPLESOFT - CAUSES ILLEGAL DIRECT ERROR IF PROGRAM NOT RUNNING (X-REG ALTERED)
ERRFLG (208) [\$00D0] \P1\	ERROR FLAG. ON IF BIT 7 SET (PEEK(216)>127). POKE 0 TO CLEAR.
ERRFLG (216) [\$00D8] \P1\	APPLESOFT ERROR FLAG: \$80 IF ONERR ACTIVE. SET TO 0 TO DISABLE 'ONERR GOTO'
ERRLIN (218~219) [\$00DA~\$00DB] \P2\	APPLESOFT LINE # WHERE ERROR OCCURED
ERRNUM (222) [\$00DE] \P1\	APPLESOFT - WHEN ERROR OCCURS TYPE-OF-ERROR CODE APPEARS HERE - SEE MANUAL FOR CODE NUMBER MEANINGS
ERROR (-11246) [\$D412] \SE\	APPLESOFT ERROR PROCESSING - CHECKS ERRFLG AND JUMPS TO HNDLERR IF ONERR IS ACTIVE OTHERWISE PRINTS ERROR MSG BASED ON CODE IN X-REG
"ERRORMESS*" (-7232) [\$E3C0] \SE\	INTEGER BASIC ENTRY POINT - INPUT ERROR MESSAGE
"ERRORMESS" (-7200) [\$E3E0] \SE\	INTEGER BASIC ENTRY POINT TO PRINT ERROR MESSAGE AND GOTO MAINLINE
ERRPOS (220~221) [\$00DC~\$00DD] \P2\	APPLESOFT TEXPTR SAVE FOR HNDLERR SUBROUTINE
ERRSTK (223) [\$00DF] \P1\	APPLESOFT STACK POINTER VALUE BEFORE ERROR OCCURED
ESC (-721) [\$FD2F]	MONITOR MEMORY LOCATION 'ESC'
ESC1 (-980) [\$FC2C] \SE\	ROUTINE (IF A=@ GO TO HOME; =A GO TO ADVANCE; =B GO TO BS (BACKSPACE); =C GO TO LF (LINEFEED); =D GO TO UP (INVERSE LINEFEED); =E GOTO CLREOL; =F GOTO CLREOP; =ANYTHING ELSE RTS & IGNORE ENTRY) CALLED BY 'RDCHAR' IF ESCAPE KEY IS INPUTTED. CALLS APPROPRIATE SCROLL WINDOW SERVICE ROUTINE (IF A=@ GO TO HOME; =A GO TO ADVANCE; =B GO TO BS (BACKSPACE); =C GO TO LF (LINEFEED); =D GO TO UP (INVERSE LINEFEED); =E GOTO CLREOL; =F GOTO CLREOP; =ANYTHING ELSE RTS & IGNORE ENTRY) (USES A-REG)
ESDFO (15975) [\$3E67] \SL\	DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR INTERIOR LABEL 'WASDO')
(EVAL EXPR =>INT) (-7931) [\$E105] \SE\	APPLESOFT - EVALUATE EXPRESSION POINTED TO BY TXTPTR (\$00B8~\$00B9) AND CONVERT RESULT (WHICH MUST BE NON-NEGATIVE) TO A TWO-BYTE INTEGER IN FACMO~FACLO (\$00A0~\$00A1)
EXCNT (70) [\$0046] \P1\	DOS DISK SYSTEM FORMATTER GENERAL COUNTER
EXP (-4343) [\$EF09] \SE\	APPLESOFT FP - RAISE E TO THE FAC POWER. RESULT TO FAC. MODIFIES INDEX CHARAC COMPTYP XORFPSGN AND MANY OTHER FP LOCNs
"EXP" (-3215) [\$F371] \SE\	INTEGER BASIC ENTRY TO ROUTINE TO EXPONENTIATE (RAISE TO A POWER)
FAC (157~163) [\$009D~\$00A3] \P6\	APPLESOFT MAIN FLOATING-POINT ACCUMULATOR (USES 6-BYTE UNPACKED MATH PACKAGE FORMAT DESCRIBED BELOW)
(FAC/ARG AND) (-8363) [\$DF55] \SE\	APPLESOFT - LET FAC = FAC 'AND' ARG; I.E. FAC=1 ONLY IF BOTH FAC & ARG <>0; IF EITHER FAC OR ARG OR BOTH =0 THEN FAC=0
(FAC/ARG COMPARE) (-8342) [\$DF6A] \SE\	APPLESOFT - COMPAREs FAC WITH ARG. TYPE OF COMPARISON CONTROLLED BY \$0016. IF CONDITION MET FAC SET TO ONE; ELSE FAC RESET TO ZERO
(FAC/ARG OR) (-8369) [\$DF4F] \SE\	APPLESOFT - LET FAC = FAC 'OR' ARG; I.E. FAC=1 IF EITHER FAC OR ARG OR BOTH <>0; FAC=0 ONLY IF BOTH FAC & ARG = 0
FACEXP (157) [\$0C9D] \P1\	EXPONENT BYTE OF FAC. SIGNED NUMBER IN EXCESS \$80 FORM (SIGNED VALUE HAS \$80 ADDED)

NAME (DEC LOCN) [HEX LOCN] \USE-TYPE\ - DESCRIPTION

FACHO (158) [\$009E] \P1\	HIGH ORDER BYTE OF MANTISSA OF FAC
FACLO (161) [\$00A1] \P1\	LOW ORDER BYTE OF MANTISSA OF FAC
FACMO (160) [\$00A0] \P1\	MIDDLE ORDER BYTE OF MANTISSA OF FAC
FACMOH (159) [\$009F] \P1\	MIDDLE ORDER HIGH BYTE OF MANTISSA OF FAC
FACMO~FACLO (160~161) [\$00A0~\$00A1]	\P2\ POINTER TO STRING DESCRIPTOR USED IN STRING UTILITIES
(FACSIGN) (162) [\$00A2] \P1\	SINGLE BYTE SIGN OF FAC. WHILE IN MATH PKG SIGN IS KEPT IN SGN WHERE ONLY BIT 7 IS SIGNIFICANT
FADD (FPADD) (-6210) [\$E7BE] \SE\	APPLESOFT FP - MOVE THE FP NUMBER IN MEMORY POINTED TO BY Y-REG & A-REG INTO ARG AND FALL INTO FADDT (FPADD). MODIFIES INDEX & XORFPSGN
FADD (-2962) [\$F46E] \SE\	FLOATING POINT NUMBER IN FP1 ADDED TO THAT IN FP2. NORMALIZED RESULT LEFT IN FP1 (A- X-REGS ALTERED)
FADDH (-6240) [\$E7A0] \SE\	APPLESOFT FP - ADD 1/2 TO FAC (1/2 IN \$EE64)
FADDT (-6207) [\$E7C1] \SE\	APPLESOFT FP - ADD FAC AND ARG. ON ENTRY A-REG AND ZERO FLAG REFLECT FACEXP. RESULT TO FAC
FAKEMON (-2755) [\$F53D]	MINIASSEMBLER MEMORY LOCATION 'FAKEMON'
FAKEMON2 (-2748) [\$F544]	MINIASSEMBLER MEMORY LOCATION 'FAKEMON2'
FAKEMON3 (-2760) [\$F538]	MINIASSEMBLER MEMORY LOCATION 'FAKEMON3'
FAKESCT (16192) [\$3F40] \SL\	DOS 3.2 DISK FORMATTER INTERIOR LABEL 'FAKESCT' AT BEGINNING OF CODE TO WRITE FAKE SECTOR
FCBFOP ZPGWRK V NPE (64~65) [\$0040~\$0041]	DOS - USED AS GENERAL POINTER BY 1ST LEVEL (COMMAND DECODE) ROUTINES IN DOS
FCOMP (-5198) [\$EBB2] \SE\	APPLESOFT FP - COMPARE FAC AND PACKED NUMBER IN MEMORY POINTED TO BY Y-REG & A-REG. ON EXIT A=1 IF MEM<FAC; A=0 IF MEM=FAC; A=\$FF IF MEM>FAC
FCOMPL (-2908) [\$F4A4] \SE\	VALUE OF FLOATING POINT NUMBER IN FP1 IS NEGATED THEN NORMALIZED (A- X-REGS ALTERED)
FDIV (FPDIV) (-5530) [\$EA66] \SE\	APPLESOFT FP - MOVE THE FP NUMBER IN MEMORY POINTED TO BY R-REG & A-REG INTO ARG AND FALL INTO FDIVT. ALTERS INDEX & XORFPSGN
FDIVT (FPDIV2) (-5527) [\$EA69] \SE\	APPLESOFT FP - DIVIDE ARG BY FAC. ON ENTRY A-REG AND Z REFLECT FACEXP. RESULT IN FAC. XORFPSGN SHOULD BE COMPUTED BEFORE CALL
FILLCNT - SCTR (75) [\$004B] \P1\	DOS DISK SYSTEM FORMATTER GENERAL COUNTER & SECTOR NUMBER
FIN (-5046) [\$EC4A] \SE\	APPLESOFT - INPUT FP NUMB INTO FAC FROM CHRGET. ASSUMES 6502 REGS HAVE BEEN SET UP BY CHRGET THAT FETCHED 1ST DIGIT
FINDOP (-2789) [\$F51B]	MINIASSEMBLER MEMORY LOCATION 'FINDOP'
FIRST (240) [\$00F0] \P1\	APPLESOFT - USED BY UTILITY PLOT FNS FOR DESTINATION OF FIRST NUMBER OF LO-RES. PLOT COORDINATES
FIX (-2496) [\$F640] \SE\	FROM FLOATING POINT NUMBER IN FP1 EXTRACT INTEGER. PJT HIGH-ORDER BYTE IN M1; LOW-ORDER IN M1+1 (A- X-REGS ALTERED)
FLAG (228) [\$00E4]	INTEGER BASIC MEMORY LOCATION 'FLAG' (GENERAL FLAG BYTE)
FLAGS (2040+S) [\$07F8+S] \P1\	EXAMPLE: APPLE SERIAL INTERFACE IN SLOT #S OPERATION MODE
FLOAT (-5229) [\$EB93] \SE\	APPLESOFT FP - FLOAT THE SIGNED INTEGER IN A-REG INTO FAC
FLOAT (-2991) [\$F451] \SE\	CONVERT INTEGER (HIGH BYTE IN M1; LOW BYTE IN M1+1; M1+2 CLEARED) TO NORMALIZED FL POINT EQUIV IN FP1 (A-REG ALTERED)
FMT (68) [\$0044] \P1\	MINIASSEMBLER MEMORY LOCATION 'FMT'
FMT1 (-1694) [\$F962]	MONITOR MEMORY LOCATION 'FMT1'
FMT2 (-1626) [\$F9A6]	MONITOR MEMORY LOCATION 'FMT2'
FMUL (-2932) [\$F48C] \SE\	FLOATING POINT MULTIPLY S/R: MULTIPLICAND IN FP1; MULTIPLIER IN FP2; SIGNED NORMALIZED PRODUCT IN FP1 (A- X- Y-REGS ALTERED)
FMUL (-2894) [\$F4B2] \SE\	FL PT DIVIDE S/R: NORM DIVIDEND IN FP2; NORM DIVIDER IN FP1; SIGNED NORM FP QUOTIENT TO FP1 (A- X- Y-REGS ALTERED)
FMULT (FPMULT) (-5761) [\$E97F] \SE\	APPLESOFT FP - MOVE THE FP NUMBER IN MEMORY POINTED TO BY Y-REG & A -REG INTO ARG AND FALL INTO FMULTT (FPMULT). ALTERS INDEX XORFPSGN
FMULTT (-5758) [\$E982] \SE\	APPLESOFT FP - MULTIPLY FAC AND ARG. ON ENTRY A-REG & ZERO FLAG REFLECT FACEXP. RESULT TO FAC. XORFPSGN MUST BE COMPUTED BEFORE CALL

NAME (DEC LOCN) [HEX LOCN] \USE-TYPE\ - DESCRIPTION

FNDLIN	(-10726) [\$D61A] \SE\	APPLESOFT - SEARCHES PROGRAM FOR LINE WHOSE NUMBER IS IN LINNUM. ON EXIT IF CARRY SET LOWTR POINTS TO LINK FIELD OF DESIRED LINE; IF NOT LOWTR TO NEXT HIGHER LINE
FNDOP2	(-2787) [\$F51D]	MINIASSEMBLER MEMORY LOCATION 'FNDOP2'
FORM1	(-2599) [\$F5D9]	MINIASSEMBLER MEMORY LOCATION 'FORM1'
FORM2	(-2597) [\$F5DB]	MINIASSEMBLER MEMORY LOCATION 'FORM2'
FORM3	(-2568) [\$F5F8]	MINIASSEMBLER MEMORY LOCATION 'FORM3'
FORM4	(-2567) [\$F5F9]	MINIASSEMBLER MEMORY LOCATION 'FORM4'
FORM5	(-2566) [\$F5FA]	MINIASSEMBLER MEMORY LOCATION 'FORM5'
FORM6	(-2552) [\$F608]	MINIASSEMBLER MEMORY LOCATION 'FORM6'
FORM7	(-2547) [\$F60D]	MINIASSEMBLER MEMORY LOCATION 'FORM7'
FORM8	(-2526) [\$F622]	MINIASSEMBLER MEMORY LOCATION 'FORM8'
FORM9	(-2511) [\$F631]	MINIASSEMBLER MEMORY LOCATION 'FORM9'
FORMAT	(46) [\$002E] \P1\	USED BY MINIASSEMBLER & DISASSEMBLER TO SPECIFY FORMAT OF INSTRUCTION FOR DISPLAY PURPOSES
FORMDSK	(-16883~-16625) [\$BE0D~\$BFOF]	DOS 3.3 - JUMP TO 'DSKFORM' (\$BEAF)
FORNDX	(251) [\$00FB] \P1\	INTEGER BASIC MEMORY LOCATION 'FORNDX' (FOR-NEXT LOOP INDEX)
FORPNT	(133~134) [\$0085~\$0086] \P2\	APPLESOFT GENERAL POINTER. SEE COPY SUBROUTINE FOR EXAMPLE
FOR	(-5830) [\$E93A] \SE\	INTEGER BASIC ENTRY TO ROUTINE TO HANDLE 'FOR' LOOP INITIALIZATION
FOUT	(256~272) [\$0100~\$0110] \PB\	FOUT BUFFER
FOUT	(-4812) [\$ED34] \SE\	CREATES A STRING IN FBUFFR EQUIVALENT IN VALUE TO FAC. ON EXITY-REG &A-REG POINT TO THE STRING. FAC SCRAMBLED
FP1	(244~247) [\$00F4~\$00F7] \P4\	MONITOR & FLOATING POINT ROUTINES FLOATING POINT ACCUMULATOR 2 (CONTAINS X2 & M2)
FP1	(248~254) [\$00F8~\$00FE] \P6\	OLD (NON-APPLESOFT) FLOATING POINT ROUTINES FLOATING POINT ACCUMULATOR FP1 (CONTAINS X1 M1 AND E (EXTENSION))
FPWRT (FPEXP)	(-4457) [\$EE97] \SE\	APPLESOFT FP EXPONENTATION (ARG TO FAC POWER) ON ENTRY A-REG & ZERO FLAG SHOULD REFLECT VALUE OF FACEXP. RESULT TO FAC. MODIFIES MANY FP LOCNS
FRESPC	(113~114) [\$0071~\$0072] \P2\	APPLESOFT TEMPORARY POINTER FOR STRING-STORAGE ROUTINES
FRESTR	(-6659) [\$E5FD] \SE\	APPLESOFT - MAKE SURE THAT LAST FAC RESULT WAS A STRING & FALL INTO FREFAC
FRETMP	(-6652) [\$E604] \SE\	APPLESOFT - FREE A TEMPORARY STRING. ON ENTRY POINTER TO DESCRIPTOR IS IN Y-REG (MSB) & X-REG (LSB)
FRETMS	(-6603) [\$E635] \SE\	APPLESOFT - FREE TEMPORARY DESCRIPTOR W/O FREEING UP THE STRING. Y-REG (MSB) & X-REG (LSB) POINT TO DESCRIPTOR TO BE FREED. ON EXIT Z SET IF ANYTHING FREED
FRETOP	(111~112) [\$006F~\$0070] \P2\	APPLESOFT POINTER TO END OF STRING STORAGE OR TOP OF USER-AVAILABLE FREE SPACE. DEFAULTS TO HIMEM - USUALLY \$BFFF FOR 48K APPLE
FRMEVL	(-8837) [\$DD7B] \SE\	APPLESOFT - EVAL FORMULA AT TXTPTR USING CHRGET & LEAVE RESULT IN FAC. ON ENTRY TXTPTR POINTS TO 1ST CHAR OF FORMULA
FRMEVL	(-8837) [\$DD7B] \SE\	APPLESOFT - EVAL FORMULA AT TXTPTR USING CHRGET. IF FORMULA IS STRING LITERAL FRMEVL GOBBLES OPENING QUOTE AND EXECUTES STRLIT & ST2TXT
FRMNUM	(-8857) [\$DD67] \SE\	APPLESOFT - EVALUATE EXPRESSION POINTED TO BY TXTPTR (\$00B8~\$00B9) (POINTS TO 1ST CHAR OF FORMULA). PUT RESULT INTO FAC & MAKE SURE IT IS A NUMBER
FRMWSYNC	(16096) [\$3EE0] \SL\	DOS 3.2 DISK FORMATTER INTERIOR LABEL 'FRMWSYNC'
FSUB (FPSUB)	(-6233) [\$E7A7] \SE\	APPLESOFT - MOVE FP NUMBER IN MEMORY POINTED TO BY Y-REG &A-REG INTO ARG AND FALL INTO FSUB (FPSUB)T
FSUB	(-2968) [\$F468] \SE\	FLOATING POINT SUBTRACTION MINUEND IN FP1; SUBTRAHEND IN FP2; NORMALIZED DIFFERENCE TO FP1 (A- X-REGS ALTERED)
FSUBT	(-6230) [\$E7AA] \SE\	APPLESOFT - FP SUBTRACT FAC FROM ARG. ON ENTRY A-REG & 6502 ZERO FLAG REFLECT FACEXP. RESULT TO FAC
GARBAG	(-7036) [\$E484] \SE\	APPLESOFT GARBAGE COLLECTOR - MOVES ALL CURRENTLY USED STRINGS UP IN MEMORY AS FAR AS POSSIBLE

FNDLIN - GARBAG

Prof. Luebbert's "What's Where in the Apple"

ALPHABETICAL GAZETTEER

NAME (DEC LOCN) [HEX LOCN] \USE-TYPE\ - DESCRIPTION

GBASCALC (-1977) [\$F847] \SE\ COMPUTE GRAPHICS BASE MEMORY ADDRESS FOR LINE IN A-REG (NOTE: 2 LO-RES GRAPHICS LINES PER TEXT LINE SO (A)= LINE/2); SET GBASL^H (A-REG ALTERED)

GBASL^GBASH (38^39) [\$0026^\$0027] \P2\MEMORY ADDRESS OF LEFT END POINT OF DESIRED LINE FOR LO-RES PLOT (SET BY GBASCALC)

GBCALC (-1962) [\$F856] MONITOR MEMORY LOCATION 'GBCALC'

GDBUFS (-10951) [\$D539] \SE\ APPLESOFT - PUT ZERO AT END OF INPUT BUFFER (BUF) AND MASK OFF MOST SIGNIFICANT BIT ON ALL BYTES. ON ENTRY X-REG=END OF INPUT LINE (A- X- Y-REGS ALTERED)

^GET16BIT (-6379) [\$E715] \SE\ INTEGER BASIC ENTRY TO GET A 16-BIT VALUE

GETADR (-6318) [\$E752] \SE\ APPLESOFT FP - CONVERT FAC (-65535 TO 65535) INTO 2-BYTE INTEGER (0-65535) IN LINNUM. 'WRAPAROUND' OCCURS IF VALUE IN FAC TOO BIG (A- Y-REGS ALTERED)

GETARYPT (-2087) [\$F7D9] \SE\ APPLESOFT - READ VAR NAME FROM CHRGET & FIND IT IN MEMORY.ON EXIT VAL OF VAR IN VARPNT AND Y-REG(MSB)&A-REG(LSB)

GETBYT (-6408) [\$E6F8] \SE\ APPLESOFT - EVAL FORMULA AT TXTPTR. LEAVE RESULT IN FAC AND FALL INTO CONINT. AT ENTRY TXTPTR POINTS TO FIRST CHAR IN FORMULA FOR FIRST NUMBER PLOTFS PUTS FIRST NUMBER IN FIRST AND SECOND NUMBER IN H2 AND V2

GETBYT (-6408) [\$E6F8] \SE\ GETBYT S/R. EVALS EXPRESSION (FORMULA) POINTED TO BY TXTPTR (\$00B8^\$00B9) & CONVTS TO 1-BYT VAL IN X-REG & FACLO(\$00A1). A-REG GETS EXPRESSION TERMINAL SIGN (RESETS Y-REG=0)

^GETCMD (-7218) [\$E3CE] \SE\ INTEGER BASIC ENTRY POINT TO GET A COMMAND FROM THE KEYBOARD

GETFMT (-1879) [\$F8A9] MONITOR MEMORY LOCATION GETFMT

GETLN (-662) [\$FD6A] \SE\ PROMPT & GET LINE OF TEXT. ON CALLING A- X- Y-REGS NOT SIGNIFICANT. CV AND BASL^H SHOULD BE COMPATIBLE POINTING IN THE SCROLL WINDOW. CH INDICATES WHERE ON LINE THE PROMPT CHARACTER IS TO BE PLACED TO BE FOLLOWED BY ECHOED KEYBOARD INPUT; OUTPUT AS FOR GETLNZ (X-REG GETS #CHARS READ. DATA TO \$200^\$200^X (MAX \$2FF) \$200^X & Y-REG GET C/R (USES NXTCHAR)) (A- X- Y-REGS ALTERED)

GETLNZ (-665) [\$FD67] \SE\ OUTPUT A C/R (THROUGH COUT). GO TO GETLN TO WRITE PROMPT & GET A LINE OF DATA (USUALLY FROM KEYBOARD); ON SET-UP A- X- Y-REGS CH AND BASL^H NOT SIGNIFICANT. CV SHOULD POINT TO A LINE IN SCROLL WINDOW; ON OUTPUT KEYED IN INFO IS IN \$200 THRU \$200^X WHERE \$200^X CONTAINS A CARRIAGE RETURN;A-REG CONTAINS CARRIAGE RETURN;X-REG CONTAINS NUMBER OF CHARACTERS READ EXCLUDING TERMINATING CARRIAGE RETURN;Y-REG CONTAINS CONTENTS OF WNDWDTH; CH CONTAINS ZERO;CV CONTAINS LINE POINTER (CURRENT VALUE);BASL^H CONTAINS MEMORY ADDRESS CORRESPONDING TO CV AND WNDLFT; SCREEN LINE IS BLANKS TO THE RIGHT OF THE END OF ECHOED INPUT (A- X- Y-REGS ALTERED)

^GETNEXT (-6027) [\$E875] \SE\ INTEGER BASIC ENTRY TO 'GETNEXT' (FETCH NEXT STATEMENT FROM TEXT SOURCE)

GETNSP (-2508) [\$F634] MONITOR MEMORY LOCATION 'GETNSP'

GETNUM (-6330) [\$E746] \SE\ APPLESOFT FP - READ 2-BYTE NUM INTO LINNUM FROM TXTPTR. CHECK FOR COMMA. GET SINGLE BYTE NUMB IN X-REG.

GETNUM (-89) [\$FFA7] MONITOR & MINIASSEMBLER MEMORY LOCATION 'GETNUM'

GETSPA (-7086) [\$E452] \SE\ APPLESOFT - GET SPACE FOR CHARACTER STRING. MOVES FRESPC & FRETOP DOWN. A-REG = # OF CHARS. POINTER TO SPC IN Y-REG(MSB) & X-REG(LSB)

^GETVAL255 (-4352) [\$EF00] \SE\ INTEGER BASIC ENTRY TO ROUTINE TO GET A ONE-BYTE VALUE

^GETVAL (-4556) [\$EE34] \SE\ INTEGER BASIC ENTRY TO ROUTINE TO GET A VALUE WHICH WILL FIT INTO A SINGLE BYTE (VAL<=255)

^GETVERB (-6401) [\$E6FF] \SE\ INTEGER BASIC ENTRY TO GET NEXT VERB TO USE

GIVAYF (INT=>FP) (-7438) [\$E2F2] \SE\APPLESOFT - FLOAT THE SIGNED INTEGER W/ LSB IN A-REG MSB IN Y-REG INTO FAC. RESETS VALTYP. (RESETS Y-REG=0)

GO (-330) [\$FEB6] \SE\ MONITOR MEMORY LOCATION 'GO'

GOCAL (15809) [\$3DC1] \SL\ DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL - GO CALCULATE CORRECT TRACK

GOSSEK (15992) [\$3E78] \DL\ DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL 'GOSSEK'

GOSUBNDX (252) [\$00FC] \P1\ INTEGER BASIC MEMORY LOCATION 'GOSUBNDX' (GOSUB INDEX)

^GOSUB (-6084) [\$E83C] \SE\ INTEGER BASIC ENTRY TO GOSUB HANDLER

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GOTO (-9922) [$D93E] \SE\      APPLESOFT - USES LINGET & FNDLIN TO UPDATE TXTPTR. GOTO ASSUMES 6502 REGS HAVE
                                BEEN SET UP BY CHRGET THAT FETCHED 1ST DIGIT
"GOTO" (-6053) [$E85B] \SE\      INTEGER BASIC ENTRY TO "GOTO" HANDLER
GTBYTC (-6411) [$E6F5] \SE\      APPLESOFT - JSR TO CHRGET TO GOBBLE A CHARACTER AND FALL INTO GETBYT
H2 (44) [$002C] \P1\           RIGHT END POINT OF A HORIZONTAL LINE BEING DRAWN BY HLINE: RANGE 0-39 ($0-$27)
HANDLERR (-3351) [$F2E9] \SE\    APPLESOFT ERROR PROC - SAVE CURLIN IN ERRLIN;TXTPTR IN ERRPOS;X-REG IN ERRNUM;
                                REMSTK IN ERRSTK
HBASL~HBASH (38~39) [$0026~$0027] \P2\HI-RES GRAPHICS ON-THE-FLY BASE ADDRESS (LEFT END POINT OF DESIRED LINE FOR
                                HI-RES PLOT)
HCLR (-12274) [$D00E] \SE\      HI-RES GRAPHICS CLEAR S/R CALL
HCLR (-3090) [$F3EE] \SE\      APPLESOFT HI-RES - CLEAR HI-RES SCREEN TO BLACK
HCOLOR (804) [$0324] \P1\      HI-RES GRAPHICS COLOR FOR HPLT~ HPOSN
HCOLOR1 (28) [$001C] \P1\      HI-RES RUNNING COLOR MASK (ON-THE-FLY COLOR BYTE)
HEADR (-823) [$FCC9]           MONITOR - WRITES SYNCHRONIZATION MONOTONE WHICH IS FIRST PART OF EVERY CASSETTE
                                TAPE RECORD
"HEX/DEC" (-6885) [$E51B] \SE\    INTEGER BASIC - DECIMAL LPRINT (LINE NUMBER PRINT) S/R; CONVERTS 2-BYTE (16-BIT)
                                BINARY/HEX TO UNSIGNED DECIMAL (0-65535)
HFIND (-11780) [$D1FC] \SE\      HI-RES GRAPHICS FIND S/R CALL: PARAM=SHAPE~ROT~SCALE
HFIND (-2613) [$F5CB] \SE\      APPLESOFT HI-RES HFIND. CONVERT HI-RES CURSOR POSN TO X-Y COORDS. ON EXIT
                                $00E0=HORIZ LSB;$00E1=HORIZ MSB;$00E2=VERT
HFNS (-2375) [$F6B9] \SE\      APPLESOFT - GET HI-RES PLOTTING COORDINATE FROM TXTPTR SETS UP 6502 REGISTERS FOR
                                HPOSN: A-REG=VERT COORD;X-REG LSB OF HORIZ;Y-REG MSB OF HORIZ (A- X- Y-REGS
                                ALTERED)
HGR (-3106) [$F3DE] \SE\      APPLESOFT HI-RES - INITIALIZE & CLEAR PAGE 1 HI-RES REGARDLESS OF SCREEN BEING
                                DISPLAYED
HGR2 (-3116) [$F3D4] \SE\      APPLESOFT HI-RES - INITIALIZE & CLEAR PAGE 2 HI-RES REGARDLESS OF SCREEN BEING
                                DISPLAYED
(HI-RES P1) (8192~16383) [$2000~$3FFF] \HB\HI-RES GRAPHICS PAGE 1
(HI-RES PAGE 2) (16384~24575) [$4000~$5FFF] \HB\HI-RES GRAPHICS PAGE 2
HI-RES (-16297) [$C057] \H1\      POKE TO 0 TO SET TO HI-RES GRAPHICS FROM LO-RES OR TEXT (SAME PAGE)
HIGHDS (148~149) [$0094~$0095] \P2\ USED BY BLOCK TRANSFER UTILITY (BLTU) AS HIGH DESTINATION
HIGHTR (150~151) [$0096~$0097] \P2\ APPLESOFT - USED BY BLOCK TRANSFER UTILITY (BLTU) AS HIGH END OF BLOCK TO BE
                                TRANSFERRED
HIMEM~HIMEMH (76~77) [$004C~$004D] \P2\ADDRESS POINTER TO HIMEM (INTEGER BASIC - END OF BASIC PROGRAM)(APPLESOFT -
                                START OF STRING DATA)
"HIMEM" (-4019) [$F04D] \SE\      INTEGER BASIC ENTRY TO THE HIMEM FUNCTION
(HIRES P1L000) (8192~8231) [$2000~$2027] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #000
(HIRES P1L001) (9216~9255) [$2400~$2427] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #001
(HIRES P1L002) (10240~10279) [$2800~$2827] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #002
(HIRES P1L003) (11264~11303) [$2C00~$2C27] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #003
(HIRES P1L004) (12288~12327) [$3000~$3027] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #004
(HIRES P1L005) (13312~13351) [$3400~$3427] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #005
(HIRES P1L006) (14336~14375) [$3800~$3827] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #006
(HIRES P1L007) (15360~15399) [$3C00~$3C27] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #007
(HIRES P1L008) (8320~8359) [$2080~$20A7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #008
(HIRES P1L009) (9344~9383) [$2480~$24A7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #009
(HIRES P1L010) (10368~10407) [$2880~$28A7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #010
(HIRES P1L011) (11392~11431) [$2C80~$2CA7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #011
(HIRES P1L012) (12416~12455) [$3080~$30A7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #012
(HIRES P1L013) (13440~13479) [$3480~$34A7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #013
(HIRES P1L014) (14464~14503) [$3880~$38A7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #014

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GOTO - (HIRES P1L014)

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ALPHABETICAL GAZETTEER

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(HIRES P1L015) (15488~15527) [\$3C80~\$3CA7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #015
 (HIRES P1L016) (8448~8487) [\$2100~\$2127] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #016
 (HIRES P1L017) (9472~9511) [\$2500~\$2527] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #017
 (HIRES P1L018) (10496~10535) [\$2900~\$2927] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #018
 (HIRES P1L019) (11520~11559) [\$2D00~\$2D27] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #019
 (HIRES P1L020) (12544~12583) [\$3100~\$3127] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #020
 (HIRES P1L021) (13568~13607) [\$3500~\$3527] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #021
 (HIRES P1L022) (14592~14631) [\$3900~\$3927] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #022
 (HIRES P1L023) (15616~15655) [\$3D00~\$3D27] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #023
 (HIRES P1L024) (8576~8615) [\$2180~\$21A7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #024
 (HIRES P1L025) (9600~9639) [\$2580~\$25A7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #025
 (HIRES P1L026) (10624~10663) [\$2980~\$29A7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #026
 (HIRES P1L027) (11648~11687) [\$2D80~\$2DA7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #027
 (HIRES P1L028) (12672~12711) [\$3180~\$31A7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #028
 (HIRES P1L029) (13696~13735) [\$3580~\$35A7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #029
 (HIRES P1L030) (14720~14759) [\$3980~\$39A7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #030
 (HIRES P1L031) (15744~15783) [\$3D80~\$3DA7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #031
 (HIRES P1L032) (8704~8743) [\$2200~\$2227] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #032
 (HIRES P1L033) (9728~9767) [\$2600~\$2627] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #033
 (HIRES P1L034) (10752~10791) [\$2A00~\$2A27] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #034
 (HIRES P1L035) (11776~11815) [\$2E00~\$2E27] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #035
 (HIRES P1L036) (12800~12839) [\$3200~\$3227] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #036
 (HIRES P1L037) (13824~13863) [\$3600~\$3627] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #037
 (HIRES P1L038) (14848~14887) [\$3A00~\$3A27] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #038
 (HIRES P1L039) (15872~15911) [\$3E00~\$3E27] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #039
 (HIRES P1L040) (8832~8871) [\$2280~\$22A7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #040
 (HIRES P1L041) (9856~9895) [\$2680~\$26A7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #041
 (HIRES P1L042) (10880~10919) [\$2A80~\$2AA7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #042
 (HIRES P1L043) (11904~11943) [\$2E80~\$2EA7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #043
 (HIRES P1L044) (12928~12967) [\$3280~\$32A7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #044
 (HIRES P1L045) (13056~13095) [\$3300~\$3327] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #045
 (HIRES P1L045) (13952~13991) [\$3680~\$36A7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #045
 (HIRES P1L046) (14976~15015) [\$3A80~\$3AA7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #046
 (HIRES P1L047) (16000~16039) [\$3E80~\$3EA7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #047
 (HIRES P1L048) (8960~8999) [\$2300~\$2327] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #048
 (HIRES P1L049) (9984~10023) [\$2700~\$2727] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #049
 (HIRES P1L050) (11008~11047) [\$2B00~\$2B27] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #050
 (HIRES P1L051) (12032~12071) [\$2F00~\$2F27] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #051
 (HIRES P1L053) (14080~14119) [\$3700~\$3727] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #053
 (HIRES P1L054) (15104~15143) [\$3B00~\$3B27] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #054
 (HIRES P1L055) (16128~16167) [\$3F00~\$3F27] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #055
 (HIRES P1L056) (9088~9127) [\$2380~\$23A7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #056
 (HIRES P1L057) (10112~10151) [\$2780~\$27A7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #057
 (HIRES P1L058) (11136~11175) [\$2B80~\$2BA7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #058
 (HIRES P1L059) (12160~12199) [\$2F80~\$2FA7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #059
 (HIRES P1L060) (13184~13223) [\$3380~\$33A7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #060
 (HIRES P1L061) (14208~14247) [\$3780~\$37A7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #061
 (HIRES P1L062) (15232~15271) [\$3B80~\$3BA7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #062
 (HIRES P1L063) (16256~16295) [\$3F80~\$3FA7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #063
 (HIRES P1L064) (8232~8271) [\$2028~\$204F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #064
 (HIRES P1L065) (9256~9295) [\$2428~\$244F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #065

(HIRES P1L015) - (HIRES P1L065)

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(HIRES P1L066) (10280~10319) [\$2828~\$284F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #066
(HIRES P1L067) (11304~11343) [\$2C28~\$2C4F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #067
(HIRES P1L068) (12328~12367) [\$3028~\$304F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #068
(HIRES P1L069) (13352~13391) [\$3428~\$344F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #069
(HIRES P1L070) (14376~14415) [\$3828~\$384F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #070
(HIRES P1L071) (15400~15439) [\$3C28~\$3C4F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #071
(HIRES P1L072) (8360~8399) [\$20A8~\$20CF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #072
(HIRES P1L073) (9384~9423) [\$24A8~\$24CF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #073
(HIRES P1L074) (10408~10447) [\$28A8~\$28CF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #074
(HIRES P1L075) (11432~11471) [\$2CA8~\$2CCF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #075
(HIRES P1L076) (12456~12495) [\$30A8~\$30CF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #076
(HIRES P1L077) (13480~13519) [\$34A8~\$34CF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #077
(HIRES P1L078) (14504~14543) [\$38A8~\$38CF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #078
(HIRES P1L079) (15528~15567) [\$3CA8~\$3CCF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #079
(HIRES P1L081) (9512~9551) [\$2528~\$254F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #081
(HIRES P1L082) (10536~10575) [\$2928~\$294F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #082
(HIRES P1L083) (11560~11599) [\$2D28~\$2D4F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #083
(HIRES P1L084) (12584~12623) [\$3128~\$314F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #084
(HIRES P1L085) (13608~13647) [\$3528~\$354F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #085
(HIRES P1L086) (14632~14671) [\$3928~\$394F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #086
(HIRES P1L087) (15656~15695) [\$3D28~\$3D4F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #087
(HIRES P1L088) (8616~8655) [\$21A8~\$21CF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #088
(HIRES P1L089) (9640~9679) [\$25A8~\$25CF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #089
(HIRES P1L090) (10664~10703) [\$29A8~\$29CF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #090
(HIRES P1L091) (11688~11727) [\$2DA8~\$2DCF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #091
(HIRES P1L092) (12712~12751) [\$31A8~\$31CF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #092
(HIRES P1L093) (13736~13775) [\$35A8~\$35CF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #093
(HIRES P1L094) (14760~14799) [\$39A8~\$39CF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #094
(HIRES P1L095) (15784~15823) [\$3DA8~\$3DCF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #095
(HIRES P1L096) (8744~8783) [\$2228~\$224F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #096
(HIRES P1L097) (9768~9807) [\$2628~\$264F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #097
(HIRES P1L098) (10792~10831) [\$2A28~\$2A4F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #098
(HIRES P1L099) (11816~11855) [\$2E28~\$2E4F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #099
(HIRES P1L100) (12840~12879) [\$3228~\$324F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #100
(HIRES P1L101) (13864~13903) [\$3628~\$364F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #101
(HIRES P1L102) (14888~14927) [\$3A28~\$3A4F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #102
(HIRES P1L103) (15912~15951) [\$3E28~\$3E4F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #103
(HIRES P1L104) (8872~8911) [\$22A8~\$22CF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #104
(HIRES P1L105) (9896~9935) [\$26A8~\$26CF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #105
(HIRES P1L106) (10920~10959) [\$2AA8~\$2ACF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #106
(HIRES P1L107) (11944~11983) [\$2EA8~\$2ECF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #107
(HIRES P1L108) (12968~13007) [\$32A8~\$32CF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #108
(HIRES P1L109) (13992~14031) [\$36A8~\$36CF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #109
(HIRES P1L110) (15016~15055) [\$3AA8~\$3ACF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #110
(HIRES P1L111) (16040~16079) [\$3EA8~\$3ECF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #111
(HIRES P1L112) (9000~9039) [\$2328~\$234F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #112
(HIRES P1L113) (10024~10063) [\$2728~\$274F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #113
(HIRES P1L114) (11048~13871) [\$2B28~\$362F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #114
(HIRES P1L115) (12072~12111) [\$2F28~\$2F4F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #115
(HIRES P1L116) (13096~13135) [\$3328~\$334F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #116
(HIRES P1L117) (14120~14159) [\$3728~\$374F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #117

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(HIRES P1L118) (15144~13871) [\$3B28~\$362F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #118
(HIRES P1L119) (16168~16207) [\$3F28~\$3F4F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #119
(HIRES P1L120) (9128~9167) [\$23A8~\$23CF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #120
(HIRES P1L121) (10152~10191) [\$27A8~\$27CF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #121
(HIRES P1L122) (11176~11215) [\$2BA8~\$2BCF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #122
(HIRES P1L123) (12200~12239) [\$2FA8~\$2FCF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #123
(HIRES P1L124) (13224~13263) [\$33A8~\$33CF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #124
(HIRES P1L125) (14248~14287) [\$37A8~\$37CF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #125
(HIRES P1L126) (15272~15311) [\$3BA8~\$3BCF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #126
(HIRES P1L127) (16296~16335) [\$3FA8~\$3FCF] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #127
(HIRES P1L128) (8272~8311) [\$2050~\$2077] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #128
(HIRES P1L129) (9296~9335) [\$2450~\$2477] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #129
(HIRES P1L130) (10320~10359) [\$2850~\$2877] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #130
(HIRES P1L131) (11344~11383) [\$2C50~\$2C77] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #131
(HIRES P1L132) (12368~12407) [\$3050~\$3077] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #132
(HIRES P1L133) (13392~13431) [\$3450~\$3477] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #133
(HIRES P1L134) (14416~14455) [\$3850~\$3877] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #134
(HIRES P1L135) (15440~15479) [\$3C50~\$3C77] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #135
(HIRES P1L136) (8400~8423) [\$20D0~\$20E7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #136
(HIRES P1L137) (9424~9447) [\$24D0~\$24E7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #137
(HIRES P1L138) (10448~10471) [\$28D0~\$28E7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #138
(HIRES P1L139) (11472~11495) [\$2CD0~\$2CE7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #139
(HIRES P1L140) (12496~12519) [\$30D0~\$30E7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #140
(HIRES P1L141) (13520~13543) [\$34D0~\$34E7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #141
(HIRES P1L142) (14544~14567) [\$38D0~\$38E7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #142
(HIRES P1L143) (15568~15591) [\$3CD0~\$3CE7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #143
(HIRES P1L144) (8528~8575) [\$2150~\$217F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #144
(HIRES P1L145) (9552~9599) [\$2550~\$257F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #145
(HIRES P1L146) (10576~10623) [\$2950~\$297F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #146
(HIRES P1L147) (11600~11647) [\$2D50~\$2D7F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #147
(HIRES P1L148) (12624~12671) [\$3150~\$317F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #148
(HIRES P1L149) (13648~13695) [\$3550~\$357F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #149
(HIRES P1L150) (14672~14719) [\$3950~\$397F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #150
(HIRES P1L151) (15696~15743) [\$3D50~\$3D7F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #151
(HIRES P1L152) (8656~8695) [\$21D0~\$217F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #152
(HIRES P1L153) (9680~9719) [\$25D0~\$257F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #153
(HIRES P1L154) (10704~10743) [\$29D0~\$297F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #154
(HIRES P1L155) (11728~11767) [\$2DD0~\$2DF7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #155
(HIRES P1L156) (12752~12791) [\$31D0~\$317F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #156
(HIRES P1L157) (13776~13815) [\$35D0~\$357F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #157
(HIRES P1L158) (14800~14839) [\$39D0~\$397F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #158
(HIRES P1L159) (15824~15863) [\$3DD0~\$3DF7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #159
(HIRES P1L160) (8784~8823) [\$2250~\$2277] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #160
(HIRES P1L161) (9808~9847) [\$2650~\$2677] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #161
(HIRES P1L162) (10832~10871) [\$2A50~\$2A77] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #162
(HIRES P1L163) (11856~11895) [\$2E50~\$2E77] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #163
(HIRES P1L164) (12880~12919) [\$3250~\$3277] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #164
(HIRES P1L165) (13904~13943) [\$3650~\$3677] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #165
(HIRES P1L166) (14928~14967) [\$3A50~\$3A77] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #166
(HIRES P1L167) (15952~15991) [\$3E50~\$3E77] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #167
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 (HIRES P1L170) (10960~10999) [\$2AD0~\$2AF7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #170
 (HIRES P1L171) (11984~12023) [\$2ED0~\$2EF7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #171
 (HIRES P1L172) (13008~13047) [\$32D0~\$32F7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #172
 (HIRES P1L173) (14032~14071) [\$36D0~\$36F7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #173
 (HIRES P1L174) (15056~15095) [\$3AD0~\$3AF7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #174
 (HIRES P1L175) (16080~16119) [\$3ED0~\$3EF7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #175
 (HIRES P1L176) (9040~9087) [\$2350~\$237F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #176
 (HIRES P1L177) (10064~10111) [\$2750~\$277F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #177
 (HIRES P1L178) (11088~11135) [\$2B50~\$2B7F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #178
 (HIRES P1L179) (12112~12159) [\$2F50~\$2F7F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #179
 (HIRES P1L180) (13136~13183) [\$3350~\$337F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #180
 (HIRES P1L181) (14160~14207) [\$3750~\$377F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #181
 (HIRES P1L182) (15184~15231) [\$3B50~\$3B7F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #182
 (HIRES P1L183) (16208~16255) [\$3F50~\$3F7F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #183
 (HIRES P1L184) (9168~9207) [\$23D0~\$23F7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #184
 (HIRES P1L185) (10192~18423) [\$27D0~\$47F7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #185
 (HIRES P1L186) (11216~11255) [\$2BD0~\$2BF7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #186
 (HIRES P1L187) (12240~12279) [\$2FD0~\$2FF7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #187
 (HIRES P1L188) (13264~13303) [\$33D0~\$33F7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #188
 (HIRES P1L189) (14288~14327) [\$37D0~\$37F7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #189
 (HIRES P1L190) (15312~15351) [\$3BD0~\$3BF7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #190
 (HIRES P1L191) (16336~16375) [\$3FD0~\$3FF7] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #191
 (HIRES P1L80) (8488~8527) [\$2128~\$214F] \HB\HI-RES GRAPHICS: PAGE 1 - LINE #80
 (HIRES P2L000) (16384~16423) [\$4000~\$4027] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #000
 (HIRES P2L001) (17408~17447) [\$4400~\$4427] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #001
 (HIRES P2L002) (18432~18471) [\$4800~\$4827] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #002
 (HIRES P2L003) (19456~19495) [\$4C00~\$4C27] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #003
 (HIRES P2L004) (20480~20519) [\$5000~\$5027] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #004
 (HIRES P2L005) (21504~21543) [\$5400~\$5427] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #005
 (HIRES P2L006) (22528~22567) [\$5800~\$5827] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #006
 (HIRES P2L007) (23552~23591) [\$5C00~\$5C27] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #007
 (HIRES P2L008) (16512~16551) [\$4080~\$40A7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #008
 (HIRES P2L009) (17536~17575) [\$4480~\$44A7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #009
 (HIRES P2L010) (18560~18599) [\$4880~\$48A7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #010
 (HIRES P2L011) (19584~19623) [\$4C80~\$4CA7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #011
 (HIRES P2L012) (20608~20647) [\$5080~\$50A7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #012
 (HIRES P2L013) (21632~21671) [\$5480~\$54A7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #013
 (HIRES P2L014) (22656~22695) [\$5880~\$58A7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #014
 (HIRES P2L015) (23680~23719) [\$5C80~\$5CA7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #015
 (HIRES P2L016) (16640~16679) [\$4100~\$4127] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #016
 (HIRES P2L017) (17664~17703) [\$4500~\$4527] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #017
 (HIRES P2L018) (18688~18727) [\$4900~\$4927] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #018
 (HIRES P2L019) (19712~19751) [\$4D00~\$4D27] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #019
 (HIRES P2L020) (20736~20775) [\$5100~\$5127] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #020
 (HIRES P2L021) (21760~21799) [\$5500~\$5527] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #021
 (HIRES P2L022) (22784~22823) [\$5900~\$5927] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #022
 (HIRES P2L023) (23808~23847) [\$5D00~\$5D27] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #023
 (HIRES P2L024) (16768~16807) [\$4180~\$41A7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #024
 (HIRES P2L025) (17792~17831) [\$4580~\$45A7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #025
 (HIRES P2L026) (18816~18855) [\$4980~\$49A7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #026

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(HIRES P2L028)	(20864~20903)	[\$5180~\$51A7]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #028
(HIRES P2L029)	(21888~21927)	[\$5580~\$55A7]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #029
(HIRES P2L030)	(22912~22951)	[\$5980~\$59A7]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #030
(HIRES P2L031)	(23936~23975)	[\$5D80~\$5DA7]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #031
(HIRES P2L032)	(16896~16935)	[\$4200~\$4227]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #032
(HIRES P2L033)	(17920~17959)	[\$4600~\$4627]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #033
(HIRES P2L034)	(18944~18983)	[\$4A00~\$4A27]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #034
(HIRES P2L035)	(19968~20007)	[\$4E00~\$4E27]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #035
(HIRES P2L036)	(20992~21031)	[\$5200~\$5227]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #036
(HIRES P2L037)	(22016~22055)	[\$5600~\$5627]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #037
(HIRES P2L038)	(23040~23079)	[\$5A00~\$5A27]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #038
(HIRES P2L039)	(24064~24103)	[\$5E00~\$5E27]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #039
(HIRES P2L040)	(17024~17063)	[\$4280~\$42A7]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #040
(HIRES P2L041)	(18048~18087)	[\$4680~\$46A7]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #041
(HIRES P2L042)	(19072~19111)	[\$4A80~\$4AA7]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #042
(HIRES P2L043)	(20096~20135)	[\$4E80~\$4EA7]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #043
(HIRES P2L044)	(21120~21159)	[\$5280~\$52A7]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #044
(HIRES P2L045)	(21248~21287)	[\$5300~\$5327]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #045
(HIRES P2L045)	(22144~22183)	[\$5680~\$56A7]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #045
(HIRES P2L046)	(23168~23207)	[\$5A80~\$5AA7]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #046
(HIRES P2L047)	(24192~24231)	[\$5E80~\$5EA7]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #047
(HIRES P2L048)	(17152~17191)	[\$4300~\$4327]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #048
(HIRES P2L049)	(18176~18215)	[\$4700~\$4727]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #049
(HIRES P2L050)	(19200~19239)	[\$4B00~\$4B27]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #050
(HIRES P2L051)	(20224~20263)	[\$4F00~\$4F27]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #051
(HIRES P2L053)	(22272~22311)	[\$5700~\$5727]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #053
(HIRES P2L054)	(23296~23335)	[\$5B00~\$5B27]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #054
(HIRES P2L055)	(24320~24359)	[\$5F00~\$5F27]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #055
(HIRES P2L056)	(17280~17319)	[\$4380~\$43A7]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #056
(HIRES P2L057)	(18304~18343)	[\$4780~\$47A7]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #057
(HIRES P2L058)	(19328~19367)	[\$4B80~\$4BA7]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #058
(HIRES P2L059)	(20352~20391)	[\$4F80~\$4FA7]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #059
(HIRES P2L060)	(21376~21415)	[\$5380~\$53A7]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #060
(HIRES P2L061)	(22400~22439)	[\$5780~\$57A7]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #061
(HIRES P2L062)	(23424~23463)	[\$5B80~\$5BA7]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #062
(HIRES P2L063)	(24448~24487)	[\$5F80~\$5FA7]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #063
(HIRES P2L064)	(16424~16463)	[\$4028~\$404F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #064
(HIRES P2L065)	(17448~17487)	[\$4428~\$444F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #065
(HIRES P2L066)	(18472~18511)	[\$4828~\$484F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #066
(HIRES P2L067)	(19496~19535)	[\$4C28~\$4C4F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #067
(HIRES P2L068)	(20520~20559)	[\$5028~\$504F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #068
(HIRES P2L069)	(21544~21583)	[\$5428~\$544F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #069
(HIRES P2L070)	(22568~22607)	[\$5828~\$584F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #070
(HIRES P2L071)	(23592~23631)	[\$5C28~\$5C4F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #071
(HIRES P2L072)	(16552~16591)	[\$40A8~\$40CF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #072
(HIRES P2L073)	(17576~17615)	[\$44A8~\$44CF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #073
(HIRES P2L074)	(18600~18639)	[\$48A8~\$48CF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #074
(HIRES P2L075)	(19624~19663)	[\$4CA8~\$4CCF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #075
(HIRES P2L076)	(20648~20687)	[\$50A8~\$50CF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #076
(HIRES P2L077)	(21672~21711)	[\$54A8~\$54CF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #077

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(HIRES P2L079)	(23720~23759)	[\$5CA8~\$5CCF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #079
(HIRES P2L080)	(16680~16719)	[\$4128~\$414F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #080
(HIRES P2L081)	(17704~17743)	[\$4528~\$454F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #081
(HIRES P2L082)	(18728~18767)	[\$4928~\$494F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #082
(HIRES P2L083)	(19752~19791)	[\$4D28~\$4D4F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #083
(HIRES P2L084)	(20776~20815)	[\$5128~\$514F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #084
(HIRES P2L085)	(21800~21839)	[\$5528~\$554F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #085
(HIRES P2L086)	(22824~22863)	[\$5928~\$594F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #086
(HIRES P2L087)	(23848~23887)	[\$5D28~\$5D4F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #087
(HIRES P2L088)	(16808~16847)	[\$41A8~\$41CF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #088
(HIRES P2L089)	(17832~17871)	[\$45A8~\$45CF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #089
(HIRES P2L090)	(18856~18895)	[\$49A8~\$49CF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #090
(HIRES P2L091)	(19880~19919)	[\$4DA8~\$4DCF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #091
(HIRES P2L092)	(20904~20943)	[\$51A8~\$51CF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #092
(HIRES P2L093)	(21928~21967)	[\$55A8~\$55CF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #093
(HIRES P2L094)	(22952~22991)	[\$59A8~\$59CF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #094
(HIRES P2L095)	(23976~24015)	[\$5DA8~\$5DCF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #095
(HIRES P2L096)	(16936~16975)	[\$4228~\$424F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #096
(HIRES P2L098)	(18984~19023)	[\$4A28~\$4A4F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #098
(HIRES P2L099)	(20008~20047)	[\$4E28~\$4E4F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #099
(HIRES P2L100)	(21032~21071)	[\$5228~\$524F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #100
(HIRES P2L101)	(22056~22095)	[\$5628~\$564F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #101
(HIRES P2L102)	(23080~23119)	[\$5A28~\$5A4F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #102
(HIRES P2L103)	(24104~24143)	[\$5E28~\$5E4F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #103
(HIRES P2L104)	(17064~17103)	[\$42A8~\$42CF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #104
(HIRES P2L105)	(18088~18127)	[\$46A8~\$46CF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #105
(HIRES P2L106)	(19112~19151)	[\$4AA8~\$4ACF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #106
(HIRES P2L107)	(20136~20175)	[\$4EA8~\$4ECF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #107
(HIRES P2L108)	(21160~21199)	[\$52A8~\$52CF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #108
(HIRES P2L109)	(22184~22223)	[\$56A8~\$56CF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #109
(HIRES P2L110)	(23208~23247)	[\$5AA8~\$5ACF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #110
(HIRES P2L111)	(24232~24271)	[\$5EA8~\$5ECF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #111
(HIRES P2L112)	(17192~17231)	[\$4328~\$434F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #112
(HIRES P2L113)	(18216~18255)	[\$4728~\$474F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #113
(HIRES P2L114)	(19240~19279)	[\$4B28~\$4B4F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #114
(HIRES P2L115)	(20264~20303)	[\$4F28~\$4F4F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #115
(HIRES P2L116)	(21288~21327)	[\$5328~\$534F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #116
(HIRES P2L117)	(22312~22351)	[\$5728~\$574F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #117
(HIRES P2L118)	(23336~23375)	[\$5B28~\$5B4F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #118
(HIRES P2L119)	(24360~24399)	[\$5F28~\$5F4F]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #119
(HIRES P2L120)	(17320~17359)	[\$43A8~\$43CF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #120
(HIRES P2L121)	(18344~18383)	[\$47A8~\$47CF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #121
(HIRES P2L122)	(19368~19407)	[\$4BA8~\$4BCF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #122
(HIRES P2L123)	(20392~20431)	[\$4FA8~\$4FCF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #123
(HIRES P2L124)	(21416~21455)	[\$53A8~\$53CF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #124
(HIRES P2L125)	(22440~22479)	[\$57A8~\$57CF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #125
(HIRES P2L126)	(23464~23503)	[\$5BA8~\$5BCF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #126
(HIRES P2L127)	(24488~24527)	[\$5FA8~\$5FCF]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #127
(HIRES P2L128)	(16464~16503)	[\$4050~\$4077]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #128
(HIRES P2L129)	(17488~17527)	[\$4450~\$4477]	\HB\HI-RES GRAPHICS: PAGE 2 - LINE #129

(HIRES P2L078) - (HIRES P2L129)

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(HIRES P2L130) (18512~18551) [\$4850~\$4877] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #130
 (HIRES P2L131) (19536~19575) [\$4C50~\$4C77] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #131
 (HIRES P2L132) (20560~20599) [\$5050~\$5077] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #132
 (HIRES P2L133) (21584~21623) [\$5450~\$5477] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #133
 (HIRES P2L134) (22608~22647) [\$5850~\$5877] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #134
 (HIRES P2L135) (23632~23671) [\$5C50~\$5C77] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #135
 (HIRES P2L136) (16592~16615) [\$40D0~\$40E7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #136
 (HIRES P2L137) (17616~17639) [\$44D0~\$44E7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #137
 (HIRES P2L138) (18640~18663) [\$48D0~\$48E7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #138
 (HIRES P2L139) (19664~19687) [\$4CD0~\$4CE7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #139
 (HIRES P2L140) (20688~20711) [\$50D0~\$50E7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #140
 (HIRES P2L141) (21712~21735) [\$54D0~\$54E7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #141
 (HIRES P2L142) (22736~22759) [\$58D0~\$58E7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #142
 (HIRES P2L143) (23760~23783) [\$5CD0~\$5CE7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #143
 (HIRES P2L144) (16720~16767) [\$4150~\$417F] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #144
 (HIRES P2L145) (17744~17791) [\$4550~\$457F] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #145
 (HIRES P2L146) (18768~18815) [\$4950~\$497F] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #146
 (HIRES P2L147) (19792~19839) [\$4D50~\$4D7F] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #147
 (HIRES P2L148) (20816~20863) [\$5150~\$517F] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #148
 (HIRES P2L149) (21840~21887) [\$5550~\$557F] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #149
 (HIRES P2L150) (22864~22911) [\$5950~\$597F] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #150
 (HIRES P2L151) (23888~23935) [\$5D50~\$5D7F] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #151
 (HIRES P2L152) (16848~16887) [\$41D0~\$41F7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #152
 (HIRES P2L153) (17872~17911) [\$45D0~\$45F7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #153
 (HIRES P2L154) (18896~18935) [\$49D0~\$49F7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #154
 (HIRES P2L155) (19920~19959) [\$4DD0~\$4DF7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #155
 (HIRES P2L156) (20944~20983) [\$51D0~\$51F7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #156
 (HIRES P2L157) (21968~22007) [\$55D0~\$55F7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #157
 (HIRES P2L158) (22992~23031) [\$59D0~\$59F7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #158
 (HIRES P2L159) (24016~24055) [\$5DD0~\$5DF7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #159
 (HIRES P2L160) (16976~17015) [\$4250~\$4277] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #160
 (HIRES P2L161) (18000~18039) [\$4650~\$4677] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #161
 (HIRES P2L162) (19024~19063) [\$4A50~\$4A77] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #162
 (HIRES P2L163) (20048~20087) [\$4E50~\$4E77] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #163
 (HIRES P2L164) (21072~21111) [\$5250~\$5277] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #164
 (HIRES P2L165) (22096~22135) [\$5650~\$5677] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #165
 (HIRES P2L166) (23120~23159) [\$5A50~\$5A77] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #166
 (HIRES P2L167) (24144~24183) [\$5E50~\$5E77] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #167
 (HIRES P2L168) (17104~17143) [\$42D0~\$42F7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #168
 (HIRES P2L169) (18128~18167) [\$46D0~\$46F7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #169
 (HIRES P2L170) (19152~19191) [\$4AD0~\$4AF7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #170
 (HIRES P2L171) (20176~20215) [\$4ED0~\$4EF7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #171
 (HIRES P2L172) (21200~21239) [\$52D0~\$52F7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #172
 (HIRES P2L173) (22224~22263) [\$56D0~\$56F7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #173
 (HIRES P2L174) (23248~23287) [\$5AD0~\$5AF7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #174
 (HIRES P2L175) (24272~24311) [\$5ED0~\$5EF7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #175
 (HIRES P2L176) (17232~17279) [\$4350~\$437F] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #176
 (HIRES P2L177) (18256~18303) [\$4750~\$477F] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #177
 (HIRES P2L178) (19280~19327) [\$4B50~\$4B7F] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #178
 (HIRES P2L179) (20304~20351) [\$4F50~\$4F7F] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #179
 (HIRES P2L180) (21328~21375) [\$5350~\$537F] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #180

(HIRES P2L130) - (HIRES P2L180)

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(HIRES P2L181) (22352~22399) [$5750~$577F] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #181
(HIRES P2L182) (23376~23423) [$5B50~$5B7F] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #182
(HIRES P2L183) (24400~24447) [$5F50~$5F7F] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #183
(HIRES P2L184) (17360~17399) [$43D0~$43F7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #184
(HIRES P2L185) (18384~18423) [$47D0~$47F7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #185
(HIRES P2L186) (19408~19447) [$4BD0~$4BF7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #186
(HIRES P2L187) (20432~20471) [$4FD0~$4FF7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #187
(HIRES P2L188) (21456~21495) [$53D0~$53F7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #188
(HIRES P2L189) (22480~22519) [$57D0~$57F7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #189
(HIRES P2L190) (23504~23543) [$5BD0~$5BF7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #190
(HIRES P2L191) (24528~24567) [$5FD0~$5FF7] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #191
(HIRES P2L97) (17960~17999) [$4628~$464F] \HB\HI-RES GRAPHICS: PAGE 2 - LINE #97
HISCR (-16299) [$C055] \H1\ POKE TO 0 TO DISPLAY PAGE 2 (DOES NOT CLEAR SCREEN)
HLIN (-2768) [$F530] \SE\ APPLESOFT HI-RES HORIZ LINE DRAWING FROM LAST POINT PLOTTED TOX-COORD =
X-REG(MSB)&A-REG(LSB);Y-COORD=Y-REG
HLINE (-2023) [$F819] \SE\ LO-RES S/R TO DRAW HORIZONTAL LINE AT Y-COORD = (A-REG) WITH X-COORDS FROM
(A-REG) THRU (H2)($002C) (A- Y-REGS ALTERED)
HLINE1 (-2020) [$F81C] \SE\ LO-RES S/R. DRAW HORIZ LINE AT Y-COORD ESTAB BY GBASL^H & MASK. X-CORDS FROM
(Y-REG) THRU ($002C) (A- Y-REGS ALTERED)
"HLIN" (-4432) [$EEB0] \SE\ INTEGER BASIC ENTRY POINT TO DRAW A LO-RES HORIZONTAL LINE
HMASK (48) [$0030] \P1\ HI-RES GRAPHICS ON-THE-FLY BIT MASK
HNDLERR (15913) [$3E29] \SL\ DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL AT START OF ERROR
HANDLING MODULE
HNDLERR (-16824~-16816) [$BE48~$BE50] DOS 3.3 - SET CARRY; STORE A-REG IN IOB AS RETURN CODE. TURN OFF MOTOR. RETURN
TO CALLER
HNDX (805) [$0325] \P1\ HI-RES ON-THE-FLY BYTE INDEX FROM BASE ADDRESS TO CURRENT PLOT BYTE (FUNCTION
OF CURRENT X-COORD)
HOME (-936) [$FC58] \SE\ CLEAR SCROLL WINDOW TO BLANKS. SET CURSOR TO TOP LEFT CORNER (A- Y-REGS
ALTERED)
HPAG (230) [$00E6] \P1\ HI-RES PAGE TO PLOT ON REGARDLESS OF WHICH PAGE BEING DISPLAYED - $20 FOR PG1;
$40 FOR PG2
HPAG (806) [$0326] \P1\ HI-ORDER BYTE OF START ADDR OF CURRENT HI-RES DISPLAY MEM PG (POKE 32 FOR
HI-RES PG1 ~ 64 FOR PG2)
HPAG (806) [$0326] \P1\ HI-RES GRAPHICS MEM PAGE FOR PLOTTING GRAPHICS $20 FOR PG1 ~$40 FOR PG2
HPL0T (-2989) [$F453] \SE\ APPLESOFT HI-RES - CALL HPOSN THEN PLOT DOT THERE. NO DOT MAY BE PLOTTED IS
PLOTTING NON-WHITE AT COMPLEMENTARY COLOR X COORD
HPOSN (-3059) [$F40D] \SE\ APPLESOFT HI-RES - POSN HI-RES CURSOR W/O PLOTTING. HPAG DETERMINES WHICH
PAGE; HORIZ = Y-REG(MSB)&X-REG(LSB);VERT= A-REG
(I/O HOOK TBLS) (54~57) [$0036~$0039] \PB\MONITOR OUTPUT & INPUT HOOKS (VECTORS TO DOS OUTPUT & INPUT ROUTINES)
IEVEN (-1893) [$F89B] MONITOR MEMORY LOCATION 'IEVEN'
"IF/THEN" (-6104) [$E828] \SE\ INTEGER BASIC ENTRY TO IF/THEN ROUTINE
IFSKIP (212) [$00D4] \P1\ INTEGER BASIC MEMORY LOCATION 'IFSKIP' (IF/THEN FAIL FLAG)
ILEAV (-16456~-16441) [$BFB8~$BFC7] DOS 3.3 - SECTOR TRANSLATE TABLE. SECTOR INTERLEAVING DONE WITH SOFTWARE
(ILLDIRPRT) (-7413) [$E30B] \SE\ PRINT "ILLEGAL DIRECT" THEN HALT AT APPLESOFT (J) LEVEL
(ILLEGAL QTY PRT) (-7783) [$E199] \SE\ APPLESOFT - PRINT "ILLEGAL QUANTITY" AND HALT AT APPLESOFT LEVEL (J)
"IN#S" (-3046) [$F41A] \SE\ INTEGER BASIC ENTRY TO ROUTINE TO SET INPUT PORT
IN (512) [$0200] MONITOR & MINIASSEMBLER MEMORY LOCATION 'IN'
INCHR (-10925) [$D553] \SE\ APPLESOFT - GET ONE CHAR FROM CURRENT INPUT DEVICE IN A-REG & MASK OF MSB.
USES MAIN APPLE INPUT ROUTINES & SUPPORTS HANDSHAKING
INDEX (94~95) [$005E~$005F] \P2\ APPLESOFT TEMPORARY (STACK) POINTER FOR MOVING STRINGS
INIT (-1233) [$FB2F] \SE\ MONITOR S/R- SCREEN INITIALIZATION (RESET TEXT MODE)

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NAME (DEC LOCN) [HEX LOCN] \USE-TYPE\ - DESCRIPTION

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INITAN (-1425) [$FA6F] AUTOSTART MONITOR MEMORY LOCATION 'INITAN'
INITBL (-1263) [$FB11] MONITOR MEMORY LOCATION 'INITBL'
(INITFACMANT) (-5056) [$EC40] \SE\ APPLESOFT FP - INITIALIZED MANTISSA OF FAC (EXCEPT EXTENSION BYTE) TO VALUE IN A-REGISTER
INLIN (-10964) [$D52C] \SE\ APPLESOFT - INPUT LINE OF TEXT FROM CURRENT INPUT DEVICE INTO INPUT BUFFER (BUF) & FALL INTO GDBUFS. NO PROMPT!
INLIN+2 (-10962) [$D52E] \SE\ APPLESOFT - INPUT LINE OF TEXT FROM CURRENT INPUT DEVICE INTO INPUT BUFFER (BUF) & FALL INTO GDBUFS. CHAR IN X-REG USED AS PROMPT
(INP SOURCE PTR) (127~128) [$007F~$0080] \P2\APPLESOFT - PTR TO CURRENT SOURCE OF INPUT. $201 DURING INPUT STATEMENT IF STANDARD BUFFER IN USE
INPORT (-373) [$FE8B] MONITOR MEMORY LOCATION 'INPORT'
INPRT (-4839) [$ED19] \SE\ APPLESOFT - PRINT 'IN' & CURRENT LINE # FROM CURLIN. USES LPRINT
INPRT (-371) [$FE8D] MONITOR MEMORY LOCATION 'INPRT'
"INPUTSTR" (-7823) [$E171] \SE\ INTEGER BASIC ENTRY POINT TO 'INPUT A STRING' ROUTINE
"INPUT" (-5206) [$EBA4] \SE\ INTEGER BASIC ENTRY TO INPUT ROUTINE
INSDS1 (-1918) [$F882] MONITOR MEMORY LOCATION 'INSDS1'
INSDS2 (-1906) [$F88E] MONITOR S/R - DISASSEMBLER ENTRY
INSTDSP (-1840) [$F8D0] MONITOR & MINIASSEMBLER MEMORY LOCATION 'INSTDSP' (INSTRUCTION DISPLAY)
INSTDSP (-640) [$FD80] MONITOR S/R TO DISASSEMBLE INSTRUCTION AT PCH/PCL (A- X- Y-REGS ALTERED)
INT (FPINT) (-5085) [$EC23] \SE\ APPLESOFT FP - COMPUTES GREATES INT (FPINT)EGER VALUE OF FAC. MODIFIES CHARAC ($000D). USES QINT (FPINT). RESULT TO FAC. MODIFIES CHARAC ($000D)
(INT=>FP) (-8471) [$DEE9] \SE\ APPLESOFT - PULL INTEGER (X) VARIABLE POINTED TO BY FACM0~FACLO ($00A0~$00A1) INTO A-REG & Y-REG AND CONVERT TO FP IN FAC. RESETS VALTYP (RESETS Y-REG TO 0)
INTOIT (16198) [$3F46] \SL\ DOS 3.2 DISK FORMATTER INTERIOR LABEL 'INTOIT'
INVFLG (50) [$0032] \P1\ VIDEO FORMAT CONTROL: 255($FF)=NORMAL;127($7F)=FLASHING;63($3F)=INVERSE
IOBPL~H (72~73) [$0048~$0049] \P2\ DOS READ-WRITE-TRACK-SECTOR (RWTS) 'IOBPL~H' (INPUT-OUTPUT CONTROL BLOCK POINTER)
IOPRT (-357) [$FE9B] MONITOR MEMORY LOCATION 'IOPRT'
IOPRT1 (-345) [$FEA7] MONITOR MEMORY LOCATION 'IOPRT1'
IOPRT2 (-343) [$FEA9] MONITOR MEMORY LOCATION 'IOPRT2'
IORTS (-168) [$FF58] JSR HERE TO FIND OUT WHERE ONE IS. SETS OVERFLOW FLAG
IRQ (-1472) [$FA40] \SE\ AUTOSTART ROM MONITOR S/R - IRQ HANDLER
IRQ (-1402) [$FA86] \SE\ MONITOR S/R- IRQ HANDLER. NOTE: MOVED TO $FA40 IN AUTOSTART ROM
IRQADR~IRQLOC (1022~1023) [$03FE~$03FF] \P2\IRQ'S VECTORED BY POINTER HERE TO SUBROUTINE TO HANDLE INTERRUPT REQUESTS
ISCNTC (-10152) [$D858] \SE\ APPLESOFT - CHECK KEYBOARD FOR CONTROL-C ($83). EXECUTES BREAK ROUTINE IF THESE IS
ISDRV0 (15989) [$3E75] \DL\ DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL 'ISDRV0'
ISLETC (CHARCHEK) (-8067) [$E07D] \SE\ APPLESOFT - CHECKS A-REG FOR ASCII LETTER OTHERWISE CLEAR IT TO ZERO ('A' TO 'Z'). SET C (CARRY FLAG) TO 1 IF A IS A LETTER OTHERWISE CLEAR IT TO ZERO (A- X- Y-REGS NOT ALTERED)
ITSGOOD (16286) [$3F9E] \SL\ DOS 3.2 DISK FORMATTER INTERIOR LABEL AT BEGINNING OF CONTINUATION IF GOOD CONDITION DETECTED
JJTOER (15893) [$3E15] \SL\ DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL 'JJTOER'
JMPT01 (15841) [$3DE1] \SL\ DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL 'JMPT01'
JMPTOERR (15842) [$3DE2] \SL\ DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL 'JMPTOERR' (JUMP TO ERROR HANDLING ROUTINE HNDLERR)
KBD ~ IOADR [$C000~] \H1\ MONITOR I/O - PEEK TO READ KEYBOARD. IF VAL>127 KEY HAS BEEN PRESSED SINCE LAST STROBED AT $C010.
KBDSTB (-16368) [$C010] \H1\ KEYBOARD STROBE- REACTIVATES KEYBOARD SO THAT VALUE OF PRESSED KEY GOES TO $C000. SETS HIGH BITTO ZERO..-4

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NAME (DEC LOCN) [HEX LOCN] \USE-TYPE\ - DESCRIPTION

KEYIN (-741) [\$FD1B] \SE\ GETS NEXT KEY INPUT FROM KEYBOARD HARDWARE. REQUIRES LOOP TO TEST THAT KEY HAS INDEED BEEN READ; BY PRESENCE OF \$80 BIT. ALSO REQUIRES KEYBOARD STROBE TO BE HIT BEFORE NEXT KEYBOARD INPUT. AUXILLIARY ACTIONS TAKEN BY KEYIN INCLUDE RESTORING TO THE SCREEN AREA THE CHARACTER MODIFIED BY RDKEY TO REMOVE BLINK INSERTED BY RDKEY AND COUNTING UP THE RANDOM NUMBER FIELD" IGNORING OVERFLOW. SET-UP: X-REG NOT SIGNIFICANT & NOT AFFECTED; A-REG INPUT TO THIS ROUTINE STORED AT (BASL)"Y WHEN A KEY IS PRESSED BEFORE THE A-REG IS FILLED FROM THE KEYBOARD REGISTER; Y-REG USED FOR STORING A-REG IN SCREEN AREA TO (BASL)"Y; CH AND CV NOT REFEENCED; BASL" H ARE USED AS INDICATED IN RDKEY. RESJLT: A-REG CONTAINS INPUT FROM KEYBOARD REGISTER; IT IS ONLY ITEM CHANGED (A-REG ALTERED)

KEYIN2 (-735) [\$FD21] MONITOR MEMORY LOCATION KEYIN2

KSWL"KSWH (56"57) [\$0038"\$0039] \P2\ DOS INPUT HOOK; I.E. ADDRESS OF THE USER INPUT ROUTINE. CONTROLLED BY CURRIN PORT INW & KEYIN. RESET " 0 CTRL-K & INW0 SET THIS LOCN TO \$FD1B (MONITOR KEYBOARD INPUT ROUTINE); S CTRL-K & INWS SET THIS LOCN TO \$C500(SLOT 5 ROM) (MONITOR INPUT REG)

L (53) [\$0035] \P1\ MINIASSEMBLER MEMORY LOCATION 'L'

(LAST CHAR PTR) (184"185) [\$00B8"\$00B9] \P2\APPLESOFT PTR TO LAST CHAR OBTAINED THRU CHRGET ROUTINE

(LAST VBL NAME) (129"130) [\$0081"\$0082] \P2\APPLESOFT - HOLDS LAST-USED VARIABLE'S NAME

LASTIN (47) [\$002F] \P1\ USED IN CASSETTE INPUT BY RDBIT AS WORK AREA TO DETERMINE WHETHER INPUT HAS CHANGED

LASTPT (83) [\$0053] \P1\ APPLESOFT LAST USED TEMPORARY STRING POINTER

LEAD2R (250) [\$0CFA] \P1\ INTEGER BASIC MEMORY LOCATION 'LEAD2R' (LEADING ZEROS INDEX)

LEADBL (201) [\$00C9] INTEGER BASIC MEMORY LOCATION 'LEADBL' (LEADING BLANKS INDEX)

LENGTH (47) [\$002F] \P1\ USED BY DISASSEMBLER TO INDICATE LENGTH OF THE INSTRUCTION. ALSO BY TRACE

"LEN" (-4574) [\$EE22] \SE\ INTEGER BASIC ENTRY TO FUNCTION TO OBTAIN LENGTH OF A STRING

LET (-9658) [\$DA46] \SE\ APPLESOFT LET - USES CHRGET TO GET ADDRESS OF '=';EVALUATES FORMULA & STORES IT. ON ENTRY TXTPTR POINTS TO FIRST CHAR OF VARIABLE NAME

LF (-922) [\$FC66] \SE\ MONITOR S/R TO TO PERFORM A LINE FEED; I.E. INCREMENT CV; COMPARE CV TO WNDBTM IF CV<WNDBTM GOTO VTABZ TO SET BASL" H AND RETURN ELSE DECREMENT CV AND DO SCROLL (A-REG ALTERED)

LINGET (-9716) [\$DA0C] \SE\ READ 16BIT INTEGER LINE # FROM TXTPTR INTO LINNUM. SEE APPLE ORCHARD V1#1P13 FOR DETAILS

LINNUM (80"81) [\$0050"\$0051] \P2\ APPLESOFT GENERAL PURPOSE 16 BIT NUMBER LOCATION (USES INCLUDED LOCATION FOR LINE NUMBER)

LINPRT (-4828) [\$ED24] \SE\ APPLESOFT - PRINTS 2-BYTE UNSIGNED NUMBER IN X-REG (MSB) & A-REG (LSB)

LIST (-418) [\$FE5E] \SE\ CALL TO DISASSEMBLE 20 INSTRUCTIONS

LIST2 (-413) [\$FE63] MONITOR MEMORY LOCATION 'LIST2'

LMNEM"RMNEM (44"45) [\$002C"\$002D] \P2\ADDRESS POINTER USED BY DISASSEMBLER FOR INDEX TO MNEMONICS TABLE

(LN(2)) (-5828"-5824) [\$E93C"\$E940] \P5\APPLESOFT FP CONSTANT (LN(2) = .30103...

LNAL"LNAM (228"229) [\$00E4"\$00E5] \P2\INTEGER BASIC MEMORY LOCATIONS 'LNAL"LNAM' (LINE NUMBER ADDRESS)(NEXT LINE NUMBER)

(LO-RES PAGE 2) (2048"3071) [\$0800"\$0BFF] \HB\SECONDARY SCREEN BUFFER (TEXT & LOW-RES GRAPHICS PAGE 2)

LO-RES (-16298) [\$C056] \H1\ POKE TO 0 TO SET FROM HI-RES TO SAME PAGE # OF LO-RES OR TEXT

(LO-RESLNS0/1) [\$400-\$0427] \BB\ VIDEO SCREEN BUFFER LO-RES LINES 0 AND 1

(LO-RESLNS10/11) [\$0680-\$06A7] \BB\ VIDEO SCREEN BUFFER LO-RES LINES 10 AND 11

(LO-RESLNS12/13) [\$0700-\$0727] \BB\ VIDEO SCREEN BUFFER LO-RES LINES 12 AND 13

(LO-RESLNS14/15) [\$0780-\$07A7] \BB\ VIDEO SCREEN BUFFER LO-RES LINES 14 AND 15

(LO-RESLNS16/17) [\$0428-\$044F] \BB\ VIDEO SCREEN BUFFER LO-RES LINES 16 AND 17

(LO-RESLNS18/19) [\$04A8-\$04CF] \BB\ VIDEO SCREEN BUFFER LO-RES LINES 18 AND 19

(LO-RESLNS2/3) [\$0480-\$04A7] \BB\ VIDEO SCREEN BUFFER LO-RES LINES 2 AND 3

(LO-RESLNS20/21) [\$0528-\$054F] \BB\ VIDEO SCREEN BUFFER LO-RES LINES 20 AND 21

NAME (DEC LOCN) [HEX LOCN] \USE-TYPE\ - DESCRIPTION

(LO-RESLNS22/23)	[\$05A8-\$05CF] \BB\	VIDEO SCREEN BUFFER LO-RES LINES 22 AND 23
(LO-RESLNS24/25)	[\$0628-\$064F] \BB\	VIDEO SCREEN BUFFER LO-RES LINES 24 AND 25
(LO-RESLNS26/27)	[\$06A8-\$06CF] \BB\	VIDEO SCREEN BUFFER LO-RES LINES 26 AND 27
(LO-RESLNS28/29)	[\$0728-\$074F] \BB\	VIDEO SCREEN BUFFER LO-RES LINES 28 AND 29
(LO-RESLNS30/31)	[\$07A8-\$07CF] \BB\	VIDEO SCREEN BUFFER LO-RES LINES 30 AND 31
(LO-RESLNS32/33)	[\$0450-\$047F] \BB\	VIDEO SCREEN BUFFER LO-RES LINES 32 AND 33
(LO-RESLNS34/35)	[\$04D0-\$04F7] \BB\	VIDEO SCREEN BUFFER LO-RES LINES 34 AND 35
(LO-RESLNS36/37)	[\$0550-\$0577] \BB\	VIDEO SCREEN BUFFER LO-RES LINES 36 AND 37
(LO-RESLNS38/39)	[\$05D0-\$05F7] \BB\	VIDEO SCREEN BUFFER LO-RES LINES 38 AND 39
(LO-RESLNS4/5)	[\$0500-\$0527] \BB\	VIDEO SCREEN BUFFER LO-RES LINES 4 AND 5
(LO-RESLNS40/41)	[\$06=0-\$0677] \BB\	VIDEO SCREEN BUFFER LO-RES LINES 40 AND 41
(LO-RESLNS42/43)	[\$06D0-\$06F7] \BB\	VIDEO SCREEN BUFFER LO-RES LINES 42 AND 43
(LO-RESLNS44/45)	[\$0750-\$0777] \BB\	VIDEO SCREEN BUFFER LO-RES LINES 44 AND 45
(LO-RESLNS46/47)	[\$07D0-\$07F7] \BB\	VIDEO SCREEN BUFFER LO-RES LINES 46 AND 47
(LO-RESLNS6/7)	[\$0580-\$05A7] \BB\	VIDEO SCREEN BUFFER LO-RES LINES 6 AND 7
(LO-RESLNS8/9)	[\$0600-\$0627] \BB\	VIDEO SCREEN BUFFER LO-RES LINES 8 AND 9
(LOAD DOS 3.2 REGS)	(1002) [\$03EA] \SE\	RECONNECT DOS 3.2 VIA APPLE MONITOR REGS. PREVIOUS CONTENTS OF MONITOR I/O REGS (\$0036-\$0039) TO DOS 3.2 INPUT & OUTPUT REGS (DOS 3.2 REGS ALTERED)
LOAD (-10039)	[\$08C9] \SE\	APPLESOFT CASSETTE - LOAD A PROGRAM FROM CASSETTE TAPE
"LOAD"	(-3873) [\$F0DF]	INTEGER BASIC ENTRY TO LOAD SUBROUTINE (LOAD A PROGRAM FROM CASSETTE TAPE)
LOC0	(0) [\$0000] \P1\	MONITOR MEMORY LOCATION 'LOC0'. PRESET TO \$4C (JMP) - (JUMP ADDRESS IN \$001-\$002)
LOC1	(1~2) [\$0001-\$0002] \P2\	MONITOR MEMORY LOCATION 'LOC1' - POINTER PRESET TO ADDRESS OF APPLESOFT SOFT ENTRY
(LOG(E)2)	(-4389~-4385) [\$EEDB-\$EEDF]	\P5\APPLESOFT FP CONSTANT LOG(E)2
LOMEML~LOMEMH	(74~75) [\$004A-\$004B] \P2\	POINTER TO LOMEM (CONTAINS 'START OF BASIC VARIABLES' FOR INTEGER BASIC - START OF PROGRAM FOR APPLESOFT BASIC)
"LOMEM"	(-3895) [\$F0C9] \SE\	INTEGER BASIC ENTRY TO LOMEM ROUTINE
LOWSCR	(-16300) [\$C054] \H1\	POKE TO 0 TO DISPLAY PAGE 1 (DOES NOT CLEAR SCREEN)
LOWTR	(155~156) [\$009B-\$009C] \P2\	APPLESOFT GENERAL PURPOSE REGISTER USED BY GETARYPT~FNDLN~BLTU (E.G. LOW END OF BLOCK TO BE TRANSFERRED IN BLTU)
LT	(-480) [\$FE20]	MONITOR MEMORY LOCATION 'LT'
LT2	(-478) [\$FE22]	MONITOR MEMORY LOCATION 'LT2'
M	(-16384~-16369) [\$C000-\$C00F] \H1\	EQUIVALENT ADDRESSES - ALL FOR KEYBOARD INPUT BYTE. WHEN KEY PRESSED ASCII VALUE GOES THERE AND HIGH BIT SET
M1	(249~251) [\$00F9-\$00FB] \P3\	FLOATING POINT ROUTINES FLOATING POINT ACCUMULATOR FP1 MEMORY LOC 'M1' (MANTISSA)
M2	(245~247) [\$00F5-\$00F7] \P3\	MONITOR & OLD (NON-APPLESOFT) FLOATING POINT ACCUMULATOR 2 MEMORY LOC 'M2' (MANTISSA - 3 BYTES)
(MACROLINE0)	(1024~1143) [\$0400-\$0477] \HB\	TEXT VIDEO SCREEN DISPLAY PAGE 1 - MACROLINE OR SUBPAGE CONSISTING OF LINES 0 - 8 & 16
(MACROLINE1)	(1152~1271) [\$0480-\$04F7] \HB\	TEXT PAGE 1 - MACROLINE OR SUBPAGE CONSISTING OF 3 TEXT LINES OF 40 BYTES (CHARACTERS) EACH PLUS A BLOCK OF 8 I-O PERIPHERAL BYTES. SUBSEQUENT MACROLINES WILL BE OMITTED FROM DATABASE
"MAINLINE"	(-7501) [\$E2B3] \SE\	INTEGER BASIC ENTRY POINT TO MAIN LINE OF COMPILE/EXECUTE CODE
"MAN"	(-4524) [\$EE54] \SE\	INTEGER BASIC ENTRY TO MANUAL LINE NUMBER FUNCTION
MASK	(46) [\$002E] \P1\	LOW-RES COLOR GRAPHICS MASK. \$0F OR \$F0 TO SELECT HIGH OR LOW NIBBLE TO SPECIFY WHICH OF 2 PLOT LINES REP BY GBASL~H POINTER
MD1	(-1116) [\$FBA4]	MONITOR 16-BIT MULTIPLY/DIVIDE SIGN-PROCESSOR. SETS ABSOLUTE VALUES OF ACL~H MEMORY LOCATION 'MD1' AUXL~H LEAVING RESULTING SIGN IN LSB OF SIGN (\$002F)
MD2	(-1105) [\$FBAF]	MONITOR MEMORY LOCATION 'MD2'

NAME (DEC LOCN) [HEX LOCN] \USE-TYPE\ - DESCRIPTION

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MD3      (-1100) [$FBB4]      MONITOR MEMORY LOCATION 'MD3'
MDRTS    (-1088) [$FBC0]      MOVITOR MEMORY LOCATION 'MDRTS'
MEMFUL    (-7317) [$E36B] \SE\ INTEGER BASIC MEMORY FULL ERROR
MEMSIZE   (115-116) [$0073-$0074] \P2\ APPLESOFT HIMEM (HIGHEST LOC IN MEM AVAIL + 1). INIT TO HIGHEST RAM - $BFFF FOR
                                         48K APPLE IF DOS NOT ACTIVE BEGINNING OF DOS IF DOS ACTIVE
MINASM    (-2458) [$F666]      TURN ON MINIASSEMBLER (KEYBOARD INPUT WILL BE INTERPRETED AS A SEMBLY-LANGUAGE
                                         INSTRUCTION)
(MINUS.ONE.HALF) (-5833~-5813) [$E937~$E94B] \P5\APPLESOFT FP CONSTANT MINUS ONE HALF (-1/2)
MIXCLR    (-16302) [$C052] \H1\ POKE TO 0 TO RESET FROM MIXED GRAPHICS (W/4 LINES TEXT) TO FULL-SCREEN
                                         GRAPHICS
MIXSET    (-16301) [$C053] \H1\ POKE=0 TO SET TEXT/GRAPHICS MIX (BOTTOM 4 LINES TEXT)
MNEML     (-1600) [$F9C0]      MONITOR & MINIASSEMBLER MEMORY LOCATION 'MNEML'
MNEMR     (-1536) [$FA00]      MONITOR & MINIASSEMBLER MEMORY LOCATION 'MNEMR'
MNNDX1    (-1858) [$F8BE]      MONITOR MEMORY LOCATION 'MNNDX1'
MNNDX2    (-1854) [$F8C2]      MONITOR MEMORY LOCATION 'MNNDX2'
MNNDX3    (-1847) [$F8C9]      MONITOR MEMORY LOCATION 'MNNDX3'
MOD8CHK   (-595) [$FDAD]      MONITOR MEMORY LOCATION 'MOD8CHK'
MODE      (49) [$0031] \P1\    USED BY MONITOR COMMAND PROCESSING TO INDICATE DISPOSITION OF HEX INFO IN
                                         THE INPUT LINE
~MOD~     (-7558) [$E27A] \SE\  INTEGER BASIC ENTRY POINT TO MODULO FUNCTION
MON       (-155) [$FF65] \SE\  MONITOR S/R- NORMAL ENTRY TO 'TOP' OF MONITOR WHEN RUNNING (BEEPS!)
(MONITOR RESVD) (32~85) [$0020~$0055] \PB\APPLE II SYSTEM MONITOR RESERVED LOCATIONS ($0050~$0055 USED ONLY BY
                                         MULTIPLY-DIVIDE ROUTINES AND THUS AVAILABLE IN MANY SITUATIONS)
MONTIME   (70) [$0046] \P1\    DOS RWTS (READ-WRITE TRACK-SECTOR) PARAMETER 'MONTIME'
MONZ      (-151) [$FF69] \SE\  MONITOR S/R TO RESET AND ENTER MONITOR (NO BEEP)
MOTOF     (15741) [$3D7D] \SL\  DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR INTERIOR LABEL - STARTSCODE TO DELAY
                                         UNTIL MOTOR UP TO SPEED
MOTOROFF  (-16248) [$C088] \P1\ DOS 3.2 READ\WRITE TRACK~SECTOR (RWTS) PACKAGE PARAMETER 'MOTOROFF'
MOTORON   (-16247) [$C089] \P1\ DOS 3.2 READ\WRITE TRACK~SECTOR (RWTS) PACKAGE PARAMETER 'MOTORON'
MOV1F     (-5343) [$EB21] \SE\  APPLESOFT FP - PACK FAC AND MOVE IT INTO TEMP1 ($0093~$0097). USES MOVMF. ON
                                         EXIT A-REG & Z FLAG REFLECT FACEXP. MODIFIES INDEX ($005E~$005F) (RESET
                                         Y-REG=0)
MOV2F     (-5346) [$EB1E] \SE\  APPLESOFT FP - PACK FAC AND MOVE IT INTO TEMP2 ($0098~$009C). USES MOVMF. ON
                                         EXIT A-REG & Z FLAG REFLECT FACEXP (RESET Y-REG=0)
MOVAF (TR1=>2) (-5277) [$EB63] \SE\ APPLESOFT FP - PACK EXTENSION BYTE INTO FAC & MOVE FAC INTO ARG. ON EXIT
                                         A-REG = FACEXP AND ZERO FLAG IS SET. RESET EXTENSION BYTE = 0 (RESET X-REG=0)
MOVE      (-468) [$FE2C] \SE\  MONITOR S/R TO PERFORM A MEMORY MOVE (A1-A2 TO A4)(Y-REG MUST =0 AT CALL)
                                         (A-REG ALTERED)
MOVFA (TR2=>1) (-5293) [$EB53] \SE\ APPLESOFT FP - MOVE ARG INTO FAC. ON EXIT A-REG = FACEXP AND ZERO FLAG IS SET
MOVFM (FPLOAD) (-5383) [$EAF9] \SE\ APPLESOFT FP MOVE MEMORY POINTED TO BY Y-REG & A-REG INTO FAC. ON EXIT A-REG
                                         & ZERO FLAG REFLECT FACEXP. RESET EXTENSION BYTE=0 (RESET Y-REG=0)
MOVINS    (-6700) [$E5D4] \SE\  APPLESOFT - MOVE STRING WHOSE DESCRIPTOR IS POINTED TO BY STRNG1 TO MEM LOC
                                         POINTED TO BY FORPNT
MOVMF (FPSTR) (-5333) [$EB2B] \SE\ APPLESOFT FP - PACK FAC AND MOVE IT INTO MEMORY POINTED TO BY Y-REG (MSB) &
                                         X-REG (LSB). ON EXIT A-REG & ZERO FLAG REFLECT FACEXP. MODIFIES INDEX
                                         ($005E~$005F)
MOVML     (-5341) [$EB23] \SE\  APPLESOFT FP - PACK FAC AND MOVE IT INTO ZERO PAGE AREA POINTED TO BY X-REG.
                                         USES MOVMF. ON EXIT A-REG & Z FLAG REFLECT FACEXP
MOVSTR    (-6686) [$E5E2] \SE\  APPLESOFT - MOVE STRING POINTED TO BY Y-REG (MSB) & X-REG (LSB) WITH LENGH
                                         IN A-REG TO MEMORY POINTED TO BY FRESPA
MSWAIT    (-17920) [$BA00] \SB\ DOS 3.3 RWTS OPERATION TIMER ROUTINE

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NAME (DEC LOCN) [HEX LOCN] \USE-TYPE\ - DESCRIPTION

MUL	(-1181) [\$FB63] \SE\	MONITOR - UNSIGNED 16-BIT MULTIPLY S/R (NOT AVAILABLE WITH AUTOSTART ROM). SAME AS MULPM (\$FB60) EXCEPT UNSIGNED. SEE 'SIGN' AT \$002F (A- X- Y-REGS ALTERED)
MUL10	(-5575) [\$EA39] \SE\	APPLESOFT FP - MULTIPLY FAC BY 10. WORKS FOR BOTH POSITIVE & NEGATIVE NUMBERS
MUL2	(-1179) [\$FB65]	MONITOR MEMORY LOCATION 'MUL2'
MUL3	(-1171) [\$FB6D]	MONITOR MEMORY LOCATION 'MUL3'
MUL4	(-1162) [\$FB76]	MONITOR MEMORY LOCATION 'MUL4'
MUL5	(-1160) [\$FB78]	MONITOR MEMORY LOCATION 'MUL5'
MULPM	(-1184) [\$FB60] \SE\	MONITOR - SIGNED 16-BIT MULTIPLY LEAVING SIGN IN LSB OF 'SIGN' (A- X- Y-REGS ALTERED)
MULPM	(-1184~-1152) [\$FB60~\$FB80] \SB\	MONITOR 16-BIT MULTIPLY S/R (NOT IN AUTOSTART ROM). MULTIPLIER IN AUXL~AUXH (\$0054~\$0055); MULTIPLICAND IN ACL~ACH (\$0050~\$0051);XTNDL~XTNDH (\$0052~\$0053) CLEARED TO ZEROS; RESULT GOES TO EXTENDED AC (\$0050~\$0053). ALSO SEE 'SIGN' AT \$002F. (A- X-REGSY-REG ALTERED)
"MULT"	(-7646) [\$E222] \SE\	INTEGER BASIC ENTRY POINT TO MULTIPLY ROUTINE
MYSEEK	(15931) [\$3E3B] \SE\	DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL AT START OF ROUTINE WHICH SEEKS TRACK 'N' IN SLOT #X/\$10. (IF DRIVEN0 IS - THEN DRIVE 0; IF DRIVEN0 IS + THEN DRIVE 1
MYSEEK	(-16806~-16755) [\$BE5A~\$BE8D]	DOS 3.3 - HOUSEKEEPING BEFORE 'SEEKABS'. DETERMINES NUMBER OF PHASES PER TRACK & STORES TRACK INFO IN APPROPRIATE SLOT-DEPENDENT LOCN
NBITS	(1912+S) [\$0778+S] \P1\	EXAMPLE: APPLE SERIAL INTERFACE IN SLOT #S NUMBER OF DATA BITS PLUS 1 FOR START BIT
NBRNCH	(-1269) [\$FB0B]	MONITOR MEMORY LOCATION 'NBRNCH'
NEGOP	(-4400) [\$EED0] \SE\	APPLESOFT FP - LET FAC = -FAC (X- Y-REGS NOT ALTERED)
NEWMON	(-1407) [\$FA81]	AUTOSTART MONITOR MEMORY LOCATION 'NEWMON'
NEWPCL	(-1331) [\$FACD]	MONITOR MEMORY LOCATION 'NEWPCL'
NEWSTT	(-10286) [\$D7D2] \SE\	APPLESOFT - EXECUTE A NEW STATEMENT. ON ENTRY TXTPTR POINTS TO THE ':' PRECEDING THE STMT OR ZERO AT END OF PREVIOUS LIN. USE NEWSTT TO RESTART THE PROGRAM WITH CONT. THIS ROUTINE DOES NOT RETURN
"NEW"	(-6739) [\$E5AD] \SE\	INTEGER BASIC ENTRY POINT TO CLEAR OUT OLD PROGRAM AND RESET POINTERS FOR A NEW PROGRAM
(NEXT W/O FOR PRT)	(-8949) [\$DD0B] \SE\	APPLESOFT - PRINT ERROR MESSAGE "NEXT WITHOUT FOR" THEN HALT AT APPLESOFT (J) LEVEL
NEXTOP	(-2692) [\$F57C]	MINIASSEMBLER MEMORY LOCATION 'NEXTOP'
"NEXT"	(-5930) [\$E8D6] \SE\	INTEGER BASIC ENTRY TO ROUTINE TO HANDLE 'NEXT' LOOP END
NMI	(1019) [\$03FB]	NMI'S VECTORED TO THIS LOCATION
"NODSP"	(-3360) [\$F2E0] \SE\	INTEGER BASIC ENTRY TO ROUTINE TO TURN OFF DISPLAY FUNCTION
NOGOOD	(16276) [\$3F94] \SL\	DOS 3.2 DISK FORMATTER INTERIOR LABEL AT BEGINNING OF CLEAN UP IF NOGOOD CONDITION DETECTED
NORM	(-2973) [\$F463] \SE\	NORMALIZE FLOATING POINT NUMBER IN FP1 (A-REG ALTERED)
NOTCR	(-707) [\$FD3D]	MONITOR MEMORY LOCATION 'NOTCR'
NOTCR1	(-673) [\$FD5F]	MONITOR MEMORY LOCATION 'NOTCR1'
(NOTFAC)	(-8552) [\$DE98] \SE\	APPLESOFT - LET FAC = NOT(FAC); I.E. RETURNS FAC=1 IF FAC=0 OR FAC=0 IF FAC<>0
"NOTRACE"	(-3722) [\$F176] \SE\	INTEGER BASIC ENTRY TO ROUTINE TO TURN OFF TRACE MODE
NOTSURE	(15651) [\$3D23] \SL\	DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL - AT THIS POINT PROGRAM NOT SURE WHETHER MOTOR IS RUNNING (STABLE LONG ENOUGH)
"NOT"	(-6346) [\$E736] \SE\	INTEGER BASIC ENTRY TO 'NOT' (NOT A VALUE FUNCTION)
NOUNSTKC	(160~191) [\$00A0~\$00BF]	INTEGER BASIC MEMORY LOCATION 'NOUNSTKC' (NOUN STACK COUNTER)
NOUNSTKH	(120~151) [\$0078~\$0097]	INTEGER BASIC MEMORY LOCATION 'NOUNSTKH' (NOUN STACK HI BYTE)
NOUNSTKL	(80~87) [\$0050~\$0057] \P8\	INTEGER BASIC MEMORY LOCATION 'NOUNSTKL'

NAME (DEC LOCN) [HEX LOCN] \USE-TYPE\ - DESCRIPTION

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NREL      (-2696) [$F578]      MINIASSEMBLER MEMORY LOCATION 'NREL'
NXTA1     (-938) [$FCBA] \SE\   MONITOR S/R TO INCREMENT A1 (16 BITS). SET CARRY IF RESULT >=A2. (A-REG ALTERED)
NXTA4     (-844) [$FCB4] \SE\   MONITOR S/R TO INCREMENT A4 (16 BITS) THEN DO NXTA1 (A-REG ALTERED)
NXTBAS    (-104) [$FF98]      MONITOR MEMORY LOCATION 'NXTBAS'
NXTBIT    (-112) [$FF90]      MONITOR MEMORY LOCATION 'NXTBIT'
NXTBS2    (-94) [$FFA2]      MONITOR MEMORY LOCATION 'NXTBS2'
NXTBYT    (-1337) [$FAC7]     AUTOSTART MONITOR MEMORY LOCATION 'NXTBYT'
"NXTBYTE" (-8150) [$E02A] \SE\  INTEGER BASIC ENTRY POINT TO GET NEXT BYTE 16-BIT POINTER
NXTCHAR   (-651) [$FD75] \SE\  TOP POINT IN CHAR INPUT LOOP. SAME EFFECT AS GETLN EXCEPT BYPASS PRINT OF PROMPT
                                     CHARACTER; ON SET-UP X-REG SHOULD BE SET TO ZERO TO BEGIN STORING OF INPUT AT
                                     $200; A- Y-REGS NOT SIGNIFICANT; CV AND BASL^H SHOULD BE COMPATIBLE POINTING IN
                                     THE SCROLL WINDOW; CH INDICATES WHERE ECHOING OF KEYBOARD INPUT IS TO START &
                                     SHOULD BE LESS THAN WNDWDTH; RESULTS SAME AS FOR GETLNZ (A- X- Y-REGS ALTERED)
NXTCHR    (-83) [$FFAD]      MONITOR - TOP POINT IN GETLN CHARACTER INPUT LOOP; RDCHAR CALLED TO GET CHAR INTO
                                     A-REG; ON RETURN A-REG TESTED FOR PRESENCE OF CTRL-U (RIGHT ARROW); IF SO A-REG
                                     LOADED FROM SC/REEN MEMORY ASSUMING Y-REG CONTAINS SAME VALUE AS CH; IF A-REG
                                     VAL >$DF LOWER-CASE LETTER CONVERTED TO UPPER CASE; IF CHAR IS A C/R IT IS
                                     PRINTED THROUGH COUT AND RTS EXIT OF COUT WILL GIVE CONTROL BACK TO CALLING
                                     PROGRAM W/ X-REG INDICATING INPUT CHAR COUNT +1; THAT IS INPUT IS IN LOCNS $200
                                     THRU $200^X WHERE $200^X CONTAINS A C/R; ON SET-UP A- X- Y-REGS NOT SIGNIFICANT;
                                     CV & BASL^H SHOULD BE COMPATIBLE (POINTING IN THE SCROLL WINDOW); CH INDICATES
                                     HORIZ POSN IN SCROLL WINDOW WHERE CURSOR WILL BE INDICATED BY BLINKING. ON
                                     RETURN CALLER A-REG WILL CONTAIN KEY VALUE; Y-REG WILL CONTAIN CONTENTS OF
                                     CH; X-REG WILL CONTAIN SAME VALUE AS INPUT; CV CH & BASL^H WILL HAVE CHANGE ONLY
                                     IF AN ESCAPE KEY SEQUENCE HAS BEEN PERFORMED
NXTCOL     (-1953) [$F85F] \SE\ MONITOR LO-RES S/R. CHANGE COLOR TO (COLOR)+3 (A-REG ALTERED)
NXTCOL     (-1803) [$F8F5]     AUTOSTART MONITOR MEMORY LOCATION 'NXTCOL'
NXTITM     (-141) [$FF73]     MONITOR MEMORY LOCATION 'NXTITM'
NXTLINE    (-2667) [$F595]     MINIASSEMBLER MEMORY LOCATION 'NXTLINE'
NXTL^NXTM  (230^231) [$00E6^$00E7] \P2\ INTEGER BASIC MEMORY LOCATIONS 'NXTL^NXTM' (NEXT POINTER)
NXTM       (-2624) [$F5C0]     MINIASSEMBLER MEMORY LOCATION 'NXTM'
NXTM2      (-2613) [$F5CB]     MINIASSEMBLER MEMORY LOCATION 'NXTM2'
NXTMN      (-2627) [$F5BD]     MINIASSEMBLER MEMORY LOCATION 'NXTMN'
NXTPT      (16086) [$3ED6] \SL\ DOS 3.2 DISK FORMATTER - LABEL AT POINT WHERE CHECK IS MADE TO SEE IF TRACK DONE
NXTTRY     (16208) [$3F50] \SL\ DOS 3.2 DISK FORMATTER INTERIOR LABEL 'NXTTRY'
OK         (15710) [$3D5E] \SL\ DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL - STARTS CODE THAT IT IS
                                     OKAY TO CONTINUE
(OLD TEXT PTR) (121^122) [$0079^$007A] \P2\ APPLESOFT OLD TEXT PTR. PTS TO LOC IN MEM FOR NEXT STMT TO BE EXE
OLDBRK     (-1447) [$FA59]     AUTOSTART MONITOR MEMORY LOCATION 'OLDBRK'
OLDLIN     (119^120) [$0077^$0078] \P2\ APPLESOFT - LAST LINE EXECUTED - LINE # AT WHICH EXECUTION INTERRUPTED BY CTRL-C
                                     STOP ETC.
ONDRVO     (16027) [$3E9B] \DL\ DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL 'ONDRVO'
(ONE)      (-5869~-5865) [$E913^$E917] \P5\ APPLESOFT FP CONSTANT ONE =1.
(ONE-QUARTER) (-3984~-3979) [$F070^$F075] \P5\ APPLESOFT 5-BYTE FLOATING POINT CONSTANT 1/4 (0.25)
(ONE.BILLION) [$ED14^$ED18] \P5\ APPLESOFT 5-BYTE FLOATING POINT CONSTANT 1000000000 (1E9)
(ONE.HALF)   (-4508~-4504) [$EE64^$EE68] \P5\ APPLESOFT 5-BYTE FP CONSTANT ONE HALF (1/2)
ONEDLY     (-798) [$FCE2]     MONITOR MEMORY LOCATION 'ONEDLY'
ORMASK     (243) [$00F3] \P1\  MASK FOR OUTPUT CONTROL: NORMAL/FLASHING/INVERSE
(OUT OF MEM PRT) (-11248) [$D410] APPLESOFT - PRINT "OUT OF MEMORY" THEN HALT AT APPLESOFT (J) LEVEL
OUTDO      (-9380) [$DB5C] \SE\ APPLESOFT - PRINT THE CHARACTER IN A-REG. INVERSE^FLASH^NORMAL OPTIONS IN EFFECT
OUTPORT    (-363) [$FE95]     MONITOR MEMORY LOCATION 'OUTPORT'

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NREL - OUTPUT

Prof. Luebbert's "What's Where in the Apple"

ALPHABETICAL GAZETTEER

NAME (DEC LOCN) [HEX LOCN] \USE-TYPE\ - DESCRIPTION

OUTPRT	(-361) [\$FE97]	MONITOR MEMORY LOCATION 'OUTPRT'
OUTQST	(-9382) [\$DB5A] \SE\	APPLESOFT - PRINT A QUESTION MARK
OUTSPC	(-9385) [\$DB57] \SE\	APPLESOFT - PRINT A SPACE
OUTVAL	(200) [\$00C8]	INTEGER BASIC MEMORY LOCATION 'OUTVAL' (OUTPUT VALUE TEMPORARY)
(OVERFLOWPRT)	(-5931) [\$E8D5] \SE\	PRINT "OVERFLOW" THEN HALT AT THE APPLESOFT (J) LEVEL
P1L~P1H	(50~227) [\$0032~\$00E3] \P2\	INTEGER BASIC MEMORY LOCATIONS 'P1L~P1H' (AUXILIARY POINTER ONE)
P2L~P2H	(228~229) [\$00E4~\$00E5] \P2\	INTEGER BASIC MEMORY LOCATIONS 'P2L~P2H' (AUXILIARY POINTER TWO)
P3L~P3H	(230~231) [\$00E6~\$00E7] \P2\	INTEGER BASIC MEMORY LOCATIONS 'P3L~P3H' (AUXILIARY POINTER THREE)
PADDL0	(-16284) [\$C064] \H1\	MONITOR MEMORY LOCATION PADDL0; HARDWARE INDISTINGUISHABLE FROM \$C06C; STATE OF TIMER OUTPUT FOR PADDLE 0 APPEARS IN BIT 7 (NEGATIVE UNTIL TIMER EXPIRES)
PADDL0	(-16276) [\$C06C] \H1\	MONITOR MEMORY LOCATION PADDL0; HARDWARE INDISTINGUISHABLE FROM \$C064; STATE OF TIMER OUTPUT FOR PADDLE 0 APPEARS IN BIT 7 (NEGATIVE UNTIL TIMER EXPIRES)
PADDL1	(-16283) [\$C065] \H1\	MONITOR MEMORY LOCATION PADDL1; HARDWARE INDISTINGUISHABLE FROM \$C06D; STATE OF TIMER OUTPUT FOR PADDLE 1 APPEARS IN BIT 7 (NEGATIVE UNTIL TIMER EXPIRES)
PADDL1	(-16275) [\$C06D] \H1\	MONITOR MEMORY LOCATION PADDL1; HARDWARE INDISTINGUISHABLE FROM \$C065; STATE OF TIMER OUTPUT FOR PADDLE 1 APPEARS IN BIT 7 (NEGATIVE UNTIL TIMER EXPIRES)
PADDL2	(-16282) [\$C066] \H1\	MONITOR MEMORY LOCATION PADDL2; HARDWARE INDISTINGUISHABLE FROM \$C06E; STATE OF TIMER OUTPUT FOR PADDLE 2 APPEARS IN BIT 7 (NEGATIVE UNTIL TIMER EXPIRES)
PADDL2	(-16274) [\$C06E] \H1\	MONITOR MEMORY LOCATION PADDL2; HARDWARE INDISTINGUISHABLE FROM \$C066; STATE OF TIMER OUTPUT FOR PADDLE 2 APPEARS IN BIT 7 (NEGATIVE UNTIL TIMER EXPIRES)
PADDL3	(-16281) [\$C067] \H1\	MONITOR MEMORY LOCATION PADDL3; HARDWARE INDISTINGUISHABLE FROM \$C06F; STATE OF TIMER OUTPUT FOR PADDLE 3 APPEARS IN BIT 7 (NEGATIVE UNTIL TIMER EXPIRES)
PADDL3	(-16273) [\$C06F] \H1\	MONITOR MEMORY LOCATION PADDL3; HARDWARE INDISTINGUISHABLE FROM \$C067; STATE OF TIMER OUTPUT FOR PADDLE 3 APPEARS IN BIT 7 (NEGATIVE UNTIL TIMER EXPIRES)
PARCHK	(-8526) [\$DEB2] \SE\	APPLESOFT PARENTHESIS CHECK - CHECK FOR '(';EVALUATE FORMULA;CHECK FOR ')'. USES CHKOPN & FRMEVL THEN FALLS INTO CHKCLS
PCADJ	(-1709) [\$F953]	MINIASSEMBLER MEMORY LOCATION 'PCADJ' (PROGRAM COUNTER ADJUST: 0=1 BYTE; 1=2 BYTES; 2=3 BYTES)
PCADJ2	(-1708) [\$F954]	MONITOR & MINIASSEMBLER MEMORY LOCATION 'PCADJ2'
PCADJ3	(-1706) [\$F956]	MONITOR MEMORY LOCATION 'PCADJ3'
PCADJ4	(-1700) [\$F95C]	MONITOR MEMORY LOCATION 'PCADJ4'
PCINC2	(-1363) [\$FAAD]	MONITOR MEMORY LOCATION 'PCINC2'
PCINC3	(-1361) [\$FAAF]	MONITOR MEMORY LOCATION 'PCINC3'
PCL~PCH	(58~59) [\$003A~\$003B] \P2\	SAVE AND CONTROL AREA FOR PROGRAM COUNTER. USED IN BREAK PROCESSING AND MINIASSEMBLER. SET BY MONITOR CMDS L G S & T (PC SAVED HERE BY MONITOR)
"PDL"	(-3269) [\$F33B] \SE\	INTEGER BASIC ENTRY TO ROUTINE TO READ A PADDLE
"PEEK"	(-4362) [\$EEF6] \SE\	INTEGER BASIC ENTRY TO ROUTINE TO 'PEEK' AT THE CONTENTS OF A MEMORY LOCATION
PHASON	(-16255) [\$C081] \P1\	DOS 3.2 READ\WRITE TRACK\SECTOR (RWTS) PACKAGE PARAMETER 'PHASON'
PHSOFF	(-16254) [\$C082] \P1\	DOS 3.2 READ\WRITE TRACK\SECTOR (RWTS) PACKAGE PARAMETER 'PHSOFF'
PHSOFF~PHSON	(-16256~-16255) [\$C080~\$C081] \P4\	DOS 3.2 READ\WRITE TRACK\SECTOR PACKAGE PARAMETER STATEMACHINE CONTROLS TABLE: LO LO=READ;HI LO=SENSE WRITE PROTECT;LO HI=WRITE;HI HI=WRITE LOAD
(PI/2)	(-3997~-3993) [\$F063~\$F067] \P5\	APPLESOFT 5-BYTE FLOATING POINT CONSTANT PI/2 = 1.508..
PLOT	(-2048) [\$F800] \SE\	LO-RES PLOT POINT AT X-COORD=(Y-REG) Y-COORD=(A-REG) LEAVING GBASL~H AND MASK SET (SEE CALL-APPLE DEC 78) (A-REG ALTERED)
PLOT1	(-2034) [\$F80E] \SE\	LO-RES PLOT A POINT X-COORD=(Y-REG) Y-COORD PER GBASL~H & MASK (A-REG ALTERED)
PLOTFS	(-3604) [\$F1EC] \SE\	APPLESOFT - GET 2 LO-RES PLOTTING COORDS SEPARATED BY COMMA FM TXTPTR. PUT FIRST # IN FIRST AND SECOND # IN H2 & V2
"PLOT"	(-4545) [\$EE3F] \SE\	INTEGER BASIC ENTRY TO ROUTINE TO DO A LO~RES PLOT (I.E. PLOT A COLORED SQUARE ON LO-RES SCREEN)
PNL~PNH	(222~223) [\$00DE~\$00DF] \P2\	INTEGER BASIC MEMORY LOCATIONS 'PNL~PNH' (CURRENT NOUN POINTER)

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"POP" (-3737) [\$F167] \SE\ INTEGER BASIC ENTRY TO ROUTINE TO POP THE RETURN STACK FOR GOSUB
 POSTNB16 (-18238~-18213) [\$B8C2~\$B8DB] \SB\DOS 3.3 POSTNIBBLE ROUTINE. CONVERTS 342 6-BIT NIBBLES OF FORM 00XXXXXX TO
 256 8-BIT BYTES. NIBBLES STORED AT PRIMARY (\$BB00~\$BBFF) AND SECONDARY
 (\$BC00~\$BC55) BUFFERS. POINTER TO DATA PAGE STORED AT 'BUFPTR'
 (\$003E~\$003F). ON ENTRY X-REG= SLOT*16; CSW (\$0036~\$0037) POINTS TO USER
 DATA; \$0026= BYTE COUNT IN SECONDARY BUFFER. ON EXIT CARRY SET 'BUFPTR'
 Y-REG CONTAINS BYTE COUNT IN SECONDARY BUFFER
 POSTNIBL (DOS 3.2) [\$B9C1~\$BA1D] \SB\ DOS 3.1~3.2~3.2.1 (SEE \$B8C2 FOR DOS 3.3) RWTS (READ-WRITE TRACK SECTOR)
 POSTNIBL (DOS 3.2) MODULE. CONVERTS A BUFFER OF 410 (\$19A) LEFT-JUSTIFIED
 5-BIT NIBBLES TO 256 (\$100) REAL BYTES. \$003E~\$003F POINTS TO BUFFER TO PUT
 THEM INTO
 POSTNIBL (DOS 3.3) (-18238) [\$B8C2] \SB\DOS 3.3 'POSTNIBL'
 PPL~PPH (202~203) [\$00CA~\$00CB] \P2\ INTEGER BASIC PROGRAM POINTER (START-OF-PROGRAM EQUAL TO HIMEM IF NO PROGRAM)
 "PR#S" (-3127) [\$F3C9] \SE\ INTEGER BASIC ENTRY TO ROUTINE TO SET OUTPUT PORT
 PRA1 (-622) [\$FD92] \SE\ PRINT CARRIAGE RET; THEN HEX OF A1H~A1L; THEN MINUS SIGN (A- X- Y-REGS ALTERED)
 PRADR1 (-1776) [\$F910] MONITOR MEMORY LOCATION 'PRADR1' (PRINT ADDRESS)
 PRADR2 (-1772) [\$F914] MONITOR MEMORY LOCATION 'PRADR2'
 PRADR3 (-1754) [\$F926] MONITOR MEMORY LOCATION 'PRADR3'
 PRADR4 (-1750) [\$F92A] MONITOR MEMORY LOCATION 'PRADR4'
 PRADR5 (-1744) [\$F930] MONITOR MEMORY LOCATION 'PRADR5'
 PRBL2 (-1716) [\$F94C] \SE\ MONITOR S/R- PRINT BLANKS: X REG CONTAINS NUMBER TO PRINT. CLOBBERS AC~X (A-
 X-REGS ALTERED)
 PRBL3 (-1716) [\$F94C] \SE\ PRINT A-REG FOLLOWED BY (X-REG)-1 BLANKS (A- X-REGS ALTERED)
 PRBLNK (-1720) [\$F948] \SE\ PRINT THREE BLANKS THROUGH COUT (A- X-REGS ALTERED)
 PRBYTE (-550) [\$FDDA] \SE\ MONITOR S/R TO PRINT CONTENTS OF A-REG AS 2 HEX DIGITS (A-REG ALTERED)
 PREAD (-1250) [\$FB1E] \SE\ MONITOR S/R TO READ PADDLE. X-REG CONTAINS PADDLE NUMBER (0-3) OF PADDLE TO BE
 READ. PADDLE VALUE TO Y-REG (A- Y-REGS ALTERED)
 PREAD2 (-1243) [\$FB25] MONITOR MEMORY LOCATION 'PREAD2'
 PRENIBL-PRENIB16 (-18432~-18327) [\$B800~\$B869] \SB\DOS 3.1~3.2~3.3 RWTS (READ-WRITE TRACK-SECTOR) PRENIBL MODULE.
 CONVERTS A PAGE OF 256 OF REAL BYTES TO A SECTOR OF 410 (\$19A)
 RIGHT JUSTIFIED 5 BIT NIBBLES (EXCEPT DOS 3.3 CONVERTS TO 342 6
 BIT NIBBLES OF THE FORM 00XXXXXX). POINTER TO PAGE TO CONVERT AT
 \$003E~\$003F; DATA STORED AT PRIMARY XXX) SECONDARY BUFFERS; ON
 EXIT X-REG XXX) Y-REG CONTAIN \$FF & CARRY SET.
 PRERR (-211) [\$FF2D] \SE\ MONITOR S/R TO PRINT "ERR" AND SOUND BELL. (A- Y-REGS(?) ALTERED)
 PRGEND (175~176) [\$00AF~\$00B0] \P2\ APPLESOFT POINTER TO END OF PROGRAM. NOT CHANGED BY LOMEM;
 PRHEX (-541) [\$FDE3] \SE\ MONITOR S/R TO PRINT RIGHT NIBBLE OF A-REG AS A SINGLE HEX DIGIT (A-REG
 ALTERED)
 PRHEXZ (-539) [\$FDE5] MONITOR MEMORY LOCATION 'PRHEXZ'
 PRINOW (215) [\$00D7] \P1\ INTEGER BASIC MEMORY LOCATION 'PRINOW' (PRINT IT NOW FLAG)
 "PRINT" (-4397) [\$EED3] \SE\ INTEGER BASIC ENTRY POINT TO PRINT ERROR MESSAGE/BELL
 PRL~PRH (220~221) [\$00DC~\$00DD] \P2\ INTEGER BASIC MEMORY LOCATIONS 'PRL~PRH' (CURRENT LINE VALUE)
 PRMN1 (-1803) [\$F8F5] MONITOR MEMORY LOCATION 'PRMN1' (PRINT MNEMONIC)
 PRMN2 (-1799) [\$F8F9] MONITOR MEMORY LOCATION 'PRMN2'
 PRNTAX (-1727) [\$F941] \SE\ MONITOR S/R-PRINT CONTENTS OF A-REG & X-REG AS HEX DIGITS (A- X-REGS
 ALTERED)
 PRNTBL (-1829) [\$F8DB] MONITOR MEMORY LOCATION 'PRNTBL'
 PRNTFAC (-4818) [\$ED2E] \SE\ APPLESOFT - PRINTS & DESTROYS CURRENT VALUE OF FAC. USES FOUT & STROUT
 PRNTOP (-1836) [\$F8D4] MONITOR MEMORY LOCATION 'PRNTOP' (PRINT OPERATION CODE)
 "PRNTSTR" (-4605) [\$EE03] \SE\ INTEGER BASIC ENTRY TO FUNCTION WHICH PRINTS A STRING
 PRNTAX (-1724) [\$F944] \SE\ PRINT CONTENTS OF X-REG AS HEX DIGITS (A- X-REGS ALTERED)

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PRNTYX	(-1728) [\$F940] \SE\	MONITOR S/R- PRINT CONTENTS OF Y AND X AS 4 HEX DIGITS (A- X-REGS ALTERED)
PROGIO	(-9983) [\$D901] \SE\	APPLESOFT CASSETTE - SET UP A1 & A2 TO SAVE PROGRAM TEXT ON CASSETTE
PROMPT	(51) [\$0033] \P1\	PROMPT CHARACTER WRITTEN TO SCREEN WHENEVER A LINE OF INPUT IS CALLED FOR BY GETLN ROUTINE
"PRTErr"	(-3743) [\$F161] \SE\	INTEGER BASIC ENTRY TO ROUTINE TO PRINT AN ERROR MESSAGE
PRYX2	(-518) [\$FD96] \SE\	MONITOR S/R TO PRINT CAR RET THEN HEX OF Y-REG & X-REG THEN A DASH (A-REG ALTERED)
PTRGET	(-8221) [\$DFE3] \SE\	APPLESOFT - READ VAR NAME FROM CHRGET AND FIND IT IN MEMORY (OR CREATE APPROPRIATE SIMPLE VARIABLE OR ARRAY). DOES MUCH HOUSEKEEPING
PTRIG	(-16272~-16257) [\$C070~\$C07F] \H1\	ALL 16 ADDRESSES DECODE TO SINGLE SWITCH WHICH TRIGGERS PADDLE TIMERS DURING PHI-2
PTRIG	(-16272~-16257) [\$C070~\$C07F] \H1\	GAME CONTROLLER STROBE. WHEN READ CAUSES FALG INPUTS OF GAME CONTROLLERS TO GO OFF & TIMING LOOPS RESTARTED
PTRMOV	(15684) [\$3D44] \SL\	DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL - STARTS CODE TO MOVE OUT ALL POINTERS FROM IOB (IN-OUT-BLOCK) TO ZERO PAGE
PUTNEW	(-7126) [\$E42A] \SE\	APPLESOFT - STRING FUNCTION RETURNING WITH RESULT INDSCMP. MOVE DSCMP TO TEMP DESCRIPTOR & PUT POINTER TO DESCRIPTOR IN FACMO~FACLO & FLAG RESULT AS STRING
PVL~PVH	(204~205) [\$00CC~\$00CD] \P2\	INTEGER BASIC CURRENT VARIABLE POINTER (END OF CURRENT VARIABLE EQUAL TO LOMEM IF NO ACTIVE CURRENT VARIABLE)
PWDTH	(1784+S) [\$06F8+S] \P1\	EXAMPLE:APPLE SERIAL INTERFACE CARD IN SLOT #S - PRINTER WIDTH ('PWDTH')
PWRCON	(-1283) [\$FAFD]	AUTOSTART MONITOR MEMORY LOCATION 'PWRCON'
PWREDUP	(1012) [\$03F4] \P1\	AUTOSTART ROM POWER UP MASK. SET BY SETPWRC TO EXCLUSIVE 'OR' OF \$03F3 & \$00A5
PWRUP	(-1370) [\$FAA6]	AUTOSTART MONITOR MEMORY LOCATION 'PWRUP'
PXL~PXH	(224~225) [\$0CE0~\$00E1] \P2\	INTEGER BASIC MEMORY LOCATIONS 'PXL~PXH' (CURRENT VER3 POINTER)
Q6L~Q6H	(-16244~-16243) [\$C08C~\$C08D] \P2\	DOS 3.2 READ~WRITE TRACK~SECTOR PACKAGE PARAMETER 'Q6L~Q6H' (Q6 LOW CAUSES DOS 3.2 TO READ A BYTE)
Q7L~Q7H	(-16242~-16241) [\$C08E~\$C08F] \P2\	DOS 3.2 READ~WRITE TRACK~SECTOR PACKAGE PARAMETER 'Q7L~Q7H' (Q7 LOW SETS DOS 3.2 FOR READ MODE)
QDRNT	(83) [\$0053] \P1\	HI-RES GRAPHICS QDRNT: 2 LSB'S ARE ROTATION QUADRANT FOR DRAW
QINT	(-5134) [\$EBF2] \SE\	APPLESOFT QUICK GREATEST INTEGER FUNCTION. LEAVE INT(FAC)IN FAC MANTISSA (HO~MO~LO SIGNED). ASSUMES FAC<2^23 (RESET Y-REG=0)
(R0-R15)	(0~31) [\$0000~\$001F] \PB\	'SWEET-16' REGISTERS R0 THRU R15 OF 'SWEET-16' (16-BIT INTERPRETER IN MONITOR)
ROL~ROH	(0~1) [\$0000~\$0001] \P2\	'SWEET-16' REGISTER R0 (IN 16-BIT PSEUDOMACHINE IN APPLE SYSTEM MONITOR)
(R1)	(2~3) [\$0002~\$0003] \P2\	'SWEET-16' REGISTER R1 (IN 16-BIT PSEUDOMACHINE IN APPLE SYSTEM MONITOR)
(R10)	(20~21) [\$0014~\$0015] \P2\	'SWEET-16' REGISTER R10 (IN 16-BIT PSEUDOMACHINE IN APPLE SYSTEM MONITOR)
(R11)	(22~23) [\$0016~\$0017] \P2\	'SWEET-16' REGISTER R11 (IN 16-BIT PSEUDOMACHINE IN APPLE SYSTEM MONITOR)
(R12)	(24~25) [\$0018~\$0019] \P2\	'SWEET-16' REGISTER R12 (IN 16-BIT PSEUDOMACHINE IN APPLE SYSTEM MONITOR)
(R13)	(26~27) [\$001A~\$001B] \P2\	'SWEET-16' REGISTER R13 (IN 16-BIT PSEUDOMACHINE IN APPLE SYSTEM MONITOR)
(R14)	(28~29) [\$001C~\$001D] \P2\	'SWEET-16' REGISTER R14 (IN 16-BIT PSEUDOMACHINE IN APPLE SYSTEM MONITOR)
R15L~R15H	(30~31) [\$001E~\$001F] \P2\	'SWEET-16' REGISTER R15 (USED AS PROGRAM COUNTER IN 16-BIT PSEUDOMACHINE IN APPLE SYSTEM MONITOR) (REG-R15)
(R2)	(4~5) [\$0004~\$0005] \P2\	'SWEET-16' REGISTER R2 (IN 16-BIT PSEUDOMACHINE IN APPLE SYSTEM MONITOR)
(R3)	(6~7) [\$0006~\$0007] \P2\	'SWEET-16' REGISTER R3 (IN 16-BIT PSEUDOMACHINE IN APPLE SYSTEM MONITOR)
(R4)	(8~9) [\$0008~\$0009] \P2\	'SWEET-16' REGISTER R4 (IN 16-BIT PSEUDOMACHINE IN APPLE SYSTEM MONITOR)
(R5)	(10~11) [\$000A~\$000B] \P2\	'SWEET-16' REGISTER R5 (IN 16-BIT PSEUDOMACHINE IN APPLE SYSTEM MONITOR)
(R6)	(12~13) [\$000C~\$000D] \P2\	'SWEET-16' REGISTER R6 (IN 16-BIT PSEUDOMACHINE IN APPLE SYSTEM MONITOR)
(R7)	(14~15) [\$000E~\$000F] \P2\	'SWEET-16' REGISTER R7 (IN 16-BIT PSEUDOMACHINE IN APPLE SYSTEM MONITOR)
(R8)	(16~17) [\$0010~\$0011] \P2\	'SWEET-16' REGISTER R8 (IN 16-BIT PSEUDOMACHINE IN APPLE SYSTEM MONITOR)

PRNTYX - (R8)

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(R9) (18~19) [\$0012~\$0013] \P2\ 'SWEET-16' REGISTER R9 (IN 16-BIT PSEUDOMACHINE IN APPLE SYSTEM MONITOR)
 RD2 (-246) [\$FF0A] MONITOR MEMORY LOCATION 'RD2'
 RD2BIT (-774) [\$FCFA] MONITOR TWO-EDGE TAPE SENSE; I.E. LOOPS DECREMENTING Y-REG UNTIL HARDWARE HAS INDICATED TWO TRANSITIONS OF TAPE INPUT REGISTER. CONTENTS OF Y-REG ON RETURN COMPARED WITH CONTENTS ON ENTRY MEASURE TIME REQUIRED FOR TRANSITIONS. CALLS RDBIT
 RD3 (-234) [\$FF16] MONITOR MEMORY LOCATION 'RD3'
 RDADR16 [B944] DOS 3.3 SYNONYM FOR READADR
 RDBIT (-771) [\$FCFD] MONITOR - LOOPS DECREMENTING Y-REG UNTIL CASSETTE TAPE INPUT REGISTER CHANGES (EITHER 0=>1 OR 1=>0). BIT VALUE RETURNED IS DETERMINED FROM RESIDUAL COUNT OF Y-REG. CALLED BY RD2BIT AND READ
 RDBYT2 (-786) [\$FCEE] MONITOR MEMORY LOCATION 'RDBYT2'
 RDBYTE (-788) [\$FCEC] MONITOR - READS BITS FROM CASSETTE TAPE UNTIL BYTE ACCUMULATED (CALLED BY MONITOR
 RDCHAR (-715) [\$FD35] \SE\ READ MEMORY LOCATION 'RDBYTE' SHAPE TABLE LOAD)
 RDKEY (-756) [\$FD0C] \SE\ CALLS RDKEY TO GET NEXT CHAR PLACED INTO A-REG. IF ESCAPE KEY PRESSED CALLS 'ESC1' FOR ESCAPE KEY PROCESSING; AFTER ESCAPE KEY AND KEY FOLLOWING HAVE BEEN READ & PROCESSED CONTROL RETURNS TO RDCHAR ROUTINE AS IF IT WERE JUST BEING ENTERED (A- X- Y-REGS ALTERED)
 'RDKEY' (-3247) [\$F351] \SE\ SAME AS RDCHAR EXCEPT BYPASSES ESCAPE KEY MONITOR SUPPORT; PICKS UP AND SAVE THE CHARACTER IN THE SCREEN AREA AT BASL'H CH (LEAVING Y-REG CONTAINING CONTENTS OF CH) IT THEN CHANGES THAT CHARACTER TO BLINKING TO INDICATE CURRENT CURSOR POSN; ASKS FOR NEXT INPUT CHAR TO BE PLACED IN A-REG BY DOING AN INDIRECT JUMP VIA KSWL'H WHICH IS NORMALLY POINTING AT KEYIN. RETURN IS THEREFORE TO THE CALLER OF RDKEY - NOT TO RDKEY ROUTINE ITSELF. SET-UP: A- X- Y-REGS NOT SIGNIFICANT; CV AND BASL'H SHOULD BE COMPATABLE POINTING IN THE SCROLL WINDOW; CH INDICATES HORIZONTAL POSITION WHERE CURSOR WILL BLINK. RESULTS: A-REG CONTAINS THE INPUT CHARACTER (WHICH MAY BE ANY CHARACTER INCLUDING ANY CONTROL KEY OR ESCAPE KEY); X-REG IS UNCHANGED; Y-REG CONTAINS CONTENTS OF CH; CV CH BASL'H REMAIN UNCHANGED (A- X- Y-REGS ALTERED)
 RDRIGHT (15815) [\$3DC7] \SL\ INTEGER BASIC ENTRY TO ROUTINE TO READ AN INPUT FOR BASIC FROM KEYBOARD
 RDRIGHT (-16964~-16916) [\$BDBC~\$BDEC] \SB\DOS 3.3 - INITIALIZE MAX RETRIES AT 48. READ ADDRESS FIELD VIA 'RDADR16' (\$B944). IF GOOD READ BRANCH TO 'RDRIGHT' (\$BDED). IF BAD TRY AGAIN DECREMENTING RETRIES. IF NONE LEFT PREPARE TO RECALIBRATE. DECREMENT RECAL COUNT. IF NO MORE THEN 'DRVERR' (\$BE04). OTHERWISE RESET RESEKES AT 4 AND RECALIBRATE ARM. TRY AGAIN
 RDRIGHT (-16915~-16893) [\$BDED~\$BE03] \SE\DOS 3.3 - VERIFY TRACK. IF CORRECT BRANCH TO 'RTTRK' (\$BE10) OTHERWISE GOTO 'SETTRK' (\$BE95) AND DECREMENT RESEK COUNT. IF ZERO RECAL OTHERWISE RESEK TRACK
 RDSP1 (-1308) [\$FAE4] MONITOR MEMORY LOCATION 'RDSP1'
 READ (-18179~-18076) [\$B8FD~\$B964] \SB\DOS 3.1~3.2~3.2.1 (SEE \$B8DC FOR DOS 3.3 'READ') RWTS (READ-WRITE TRACK-SECTOR READ MODJLE. READS A SECTOR OFF THE DISK FORMING 410 (\$19A) 5-BIT RIGHT-JUSTIFIED NIBBLES
 READ (-259) [\$FEFD] \SE\ READS DATA FROM CASSETTE TAPE PUTTING FIRST DATA READ INTO LOCATION POINTED TO BY A1L'H (\$003C~\$003D) AND CONTINUING TO READ UNTIL DATA GOES TO LOCATION POINTED TO BY A2L'H (\$003E~\$003F). ALSO COMPUTES A RUNNING EXCLUSIVE OR CHECKSUM IN 'CHECKSUM' (\$002E)
 READ16 (-18212~-18109) [\$B8DC~\$B943] \SB\DOS 3.3 'READ' IN RWTS (READ-WRITE TRACK-SECTOR). READS A SECTOR OFF THE DISK INTO SECONDARY BUFFER (\$BC00~\$BC55) HIGH TO LOW THEN INTO PRIMARY (\$BB00~\$BBFF) LOW TO HIGH EN ROUTE TO OVERALL PROCESS OF FORMING \$153 RIGHT-JUSTIFIED 6-BIT NIBBLES

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READADR (DOS 3.2) (-18075~-17984) [\$B965~\$B9C0] \SB\DOS 3.1~3.2~3.2.1 (SEE \$B944 FOR DOS 3.3 'READADR (DOS 3.2)')
 RWTS (READ-WRITE TRACK SECTOR) READ ADDRESS MODULE. READS
 ADDRESSES ON THE SECTORS OF CURRENT TRACK UNTIL IT FINDS A
 SECTOR. THEN IT RETURNS PUTTING CHECKSUM INTO \$002C; SECTOR INTO
 \$002D; TRACK INTO \$002E; AND VOLUME INTO \$002F. CARRY IS SET ON ERROR
 READADR-RDADR16 (DOS 3.3) [.]\$B944~\$B99F] \SB\DOS 3.3 READADR. FUNCTION SAME AS READADR-RDADR16 (DOS 3.2)
 READX1 (-254) [\$FF02]
 REASON (-11293) [\$D3E3] \SE\
 REGDSP (-1321) [\$FAD7] \SE\
 REGZ (-321) [\$FEBF] \SE\
 REL (-2816) [\$F500]
 REL2 (-2804) [\$F50C]
 REL3 (-2794) [\$F516]
 RELADR (-1736) [\$F938]
 REMN (-9818) [\$D9A6] \SE\
 REMSTK (248) [\$00F8] \P1\
 (RESET) (-6066) [\$E84E] \SE\
 RESET (-1438) [\$FA62]
 RESET (-167) [\$FF59] \SE\
 RESETZ (-2670) [\$F592]
 RESTOR (-10167) [\$D849] \SE\
 RESTORE (-193) [\$FF3F] \SE\
 RESTR1 (-188) [\$FF44]
 RESUME (-3305) [\$F317] \SE\
 (RET W/O GOSUB) (-9863) [\$D979]
 ~RETURN~ (-5979) [\$E8A5] \SE\
 RGDSP1 (-1318) [\$FADA] \SE\
 RGTIM (16094) [\$3EDE] \SL\
 RND (201~205) [\$00C9~\$00CD] \P5\
 RND (-4178) [\$EFAE] \SE\
 RNDL~RNDH (78~79) [\$0C4E~\$004F] \P2\
 ~RND~ (-4274) [\$EF4E] \SE\
 RNGERR (-4504) [\$EE68] \P1\
 RTAR (-2947) [\$F47D] \SE\
 RTBL (-1255) [\$FB19]
 RTMASK (-2036) [\$F80C]

READADR (DOS 3.2) - RTMASK

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ALPHABETICAL GAZETTEER

NAME (DEC LOCN) [HEX LOCN] \USE-TYPE\ - DESCRIPTION

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RTMSKZ (-1921) [$F87F] MONITOR MEMORY LOCATION 'RTMSKZ'
RTNJMP (-1327) [$FAD1] MONITOR MEMORY LOCATION 'RTNJMP'
RTNL~RTNH (44~45) [$002C~$002D] \P2\ MONITOR RETURN POINTER (POINTS TO SAVE AREA USED BY INSTRUCTION TRACE ROUTINE)
RTS1 (-1999) [$F831] MONITOR MEMORY LOCATION 'RTS1'
RTS2 (-1695) [$F961] MONITOR MEMORY LOCATION 'RTS2'
RTS2B (-1041) [$FBF7] MONITOR MEMORY LOCATION 'RTS2B'
RTS2D (-1234) [$FB2E] MONITOR MEMORY LOCATION 'RTS2D'
RTS3 (-1028) [$FBFC] MONITOR MEMORY LOCATION 'RTS3'
RTS4 (-981) [$FC2B] MONITOR MEMORY LOCATION 'RTS4'
RTS4B (-824) [$FCC8] MONITOR MEMORY LOCATION 'RTS4B'
RTS4C (-571) [$FDC5] MONITOR MEMORY LOCATION 'RTS4C'
RTS5 (-489) [$FE17] MONITOR MEMORY LOCATION 'RTS5'
RTTRK (15856) [$3DF0] \SL\ DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR INTERIOR LABEL WHICH ASSUMES RIGHT TRACK
SELECTED AND BEGINS CHECK OF CORRECT VOLUME NUMBER ON DISKETTE
RTTRK (-16880~-16859) [$BE10~$BE25] \DOS 3.3 -CHECK VOL# FOUND VS VOL# WANTED. IF NO VOL SPECIFIED NO ERROR OTHERWISE
IF MISMATCH LOAD A-REG WITH $20 (VOLUME MISMATCH ERROR) AND EXIT VIA 'HNDLERR'
($BE48)

"RUN #N" (-4110) [$EFF2] \SE\ INTEGER BASIC ENTRY TO ROUTINE TO RUN FROM LINE #N
RUN (-10906) [$D566] \SE\ APPLESOFT - RUN THE PROGRAM IN MEMORY. THIS ROUTINE DOES NOT RETURN
RUNMODE (217) [$00D9] \P1\ INTEGER BASIC MEMORY LOCATION 'RUNMODE' USED AS RUN MODE FLAG BYTE
RUNMODE (217) [$00D9] \P1\ USED BY DOS TO TEST FOR DIRECT-DEFERRED MODE USAGE. IF $AAB6 CONTAINS 0 AND BIT 7
OF THIS LOCATION IS CLEAR DOS ASSUMES DIRECT MODE AND WILL NOT DO OPEN OR OTHER
DIRECT MODE COMMANDS

"RUN" (-4116) [$EFEC] \SE\ APPLE INTEGER BASIC RUN ROUTINE (RUN FROM BEGINNING)
RWTS (15616) [$3D00] \SE\ DOS 3.1/3.2 READ\WRITE A TRACK & SECTOR. UPON ENTRY A- & Y-REGS POINT AT I/O
CONTROL BLOCK (IOB)

RWTS (15616~16027) [$3D00~$3E9B] \SB\ DOS 3.1/3.2 RWTS SUBROUTINE
S16PAG (247) [$00F7] \P1\ SWEET-16 MEMORY LOCATION 'S16PAG'
SAMESLOT (15661) [$3D2D] \SL\ DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL - STARTS CODE TO DETERMINE IF
SAME SLOT BEING USED
SAMESLOT (-17100~-17069) [$BD34~$BD53] \SB\ ENTER READ MODE AND READ WITH DELAYS TO SEE IF DISK IS SPINNING. SAVE
RESULTS OF TEST AND TURN ON MOTOR ANYHOW
SAV1 (-180) [$FF4C] MONITOR MEMORY LOCATION 'SAV1'
SAVE (-10064) [$D8B0] \SE\ APPLESOFT CASSETTE - SAVE THE PROGRAM IN MEMORY TO CASSETTE TAPE
SAVE (-182) [$FF4A] \SE\ MONITOR S/R TO SAVE 6502 REGISTERS: (A-REG)=>$0045; (X-REG)=>$0046;
(Y-REG)=>$0047; (P-REG)=>$0048; (S-REG)=>$0049 (NONE)
"SAVE" (-3776) [$F140] \SE\ INTEGER BASIC ENTRY TO ROUTINE TO SAVE A PROGRAM TO CASSETTE TAPE
SB (6912~7423) [$1B00~$1CFF] TEMPORARY LOCATION OF DOS 3.2 RELOCATION CODE DURING DOS 3.2 BOOT (SB)
SCALE (231) [$00E7] \P1\ HI-RES GRAPHICS SCALE FACTOR
SCALE (807) [$0327] \P1\ ON-THE-FLY SCALE FACTOR FOR DRAW" SHAPE" MOVE
"SCRATCH" (-4096) [$F000] \SE\ INTEGER BASIC ENTRY TO SCRATCH EVERYTHING ROUTINE
SCRL1 (-906) [$FC76] MONITOR MEMORY LOCATION 'SCRL1'
SCRL2 (-884) [$FC8C] MONITOR MEMORY LOCATION 'SCRL2'
SCRL3 (-875) [$FC95] MONITOR - CLEAR LINE (BASL~H) (WHOLE LINE) THEN SET NEW BASL~H FROM CV & WNDLFT
SCRN (-1935) [$F871] \SE\ GET (LOAD TO A-REG) LO-RES GRAPHICS COLOR OF POINT Y-COORD = (A-REG); X-COORD =
(X-REG) (A-REG ALTERED)
SCRN2 (-1927) [$F879] MONITOR MEMORY LOCATION 'SCRN2'
"SCRN" (-7542) [$E28A] \SE\ INTEGER BASIC ENTRY POINT TO SCREEN X" Y" COLOR VALUE FUNCTION
SCROLL (-912) [$FC70] \SE\ MONITOR S/R TO SCROLL UP 1 LINE. (A- Y-REGS ALTERED)
SCRATCH (-10677) [$D64B] \SE\ APPLESOFT INITIALIZATION - THE 'NEW' COMMAND. CLEARS PROGRAM VARIABLES & STACK
SECT (45) [$002D] \P1\ DOS RWTS (READ-WRITE TRACK-SECTOR) PARAMETER FOR CURRENT DISK SECTOR

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RTMSKZ - SECT

Prof. Luebbert's "What's Where in the Apple"

ALPHABETICAL GAZETTEER

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SEEK      (15948) [$3E4C] \SE\      DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL AT SOFT ENTRY POINT OF SEEK
                                         SUBROUTINE
SEEKABS (DOS 3.2)      (-18016) [$B9A0] \SB\DOS 3.2 'SEEKABS'
SEEKABS (DOS 3.3)      (-18016~-17924) [$B9A0~$B9FC] \SB\DOS 3.3 - MOVES DISK AREM TO DESIRED TRACK. CALLS ARM MOVE DELAY
                                         SUBROUTINE ($B9FD). ON ENTRY $0478 CONTAINS CURRENT TRACK; X-REG
                                         CONTAINS SLOT*16; A-REG DESIRED TRACK. ON EXIT X-REG UNCHANGED;
                                         A-REG Y-REG CLOBBERS; $0478 &$002A: FINAL TRACK;$27 PRIOR TRACK
                                         (IF SEEK NEEDED). USES $0026;$0027;$002A;$002B. EXITS TO CALLER
SEEKABS      (-17890~-17777) [$BA1E~$BA8F] \SB\ DOS 3.1~3.2~3.2.1 (SEE $B9A0 FOR DOS 3.3) RWTS (READ-WRITE TRACK SECTOR)
SEEKABS MODULE. MOVES HEAD TO TRACK SPECIFIED BY A-REG. $0478 IS CURRENT.
RWTS DOES PHASE OFF FOR ALL FOUR BEFORE CALL
SEEKCNT      (1275) [$04FB] \P1\      DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) SEEK COUNTER PARAMETER
SETANO      (-16296) [$C058] \FF\      VALUE<>0 WHEN GAME AND IS SET. POKE 0 TO CLEAR GAME I/O OUTPUT AND (3.5V
                                         AT PIN 15)
SETAN1      (-16294) [$C05A] \FF\      POKE 0 TO CLEAR GAME I/O OUTPUT AN1 (3.5V AT PIN 14)
SETAN2      (-16292) [$C05C] \FF\      POKE 0 TO CLEAR GAME I/O OUTPUT AN2 (3.5V AT PIN 13)
SETAN3      (-16290) [$C05E] \FF\      POKE 0 TO CLEAR GAME I/O OUTPUT AN3 (3.5V AT PIN 12)
"SETBUF"      (-3796) [$F12C] \SE\      INTEGER BASIC ENTRY TO ROUTINE TO SET UP PROGRAM SAVE/LOAD PARAMETERS
SETCOL      (-1948) [$F864] \SE\      SET LO-RES COLOR TO COLOR CODE SPECIFIED BY A-REG FOR FUTURE PLOTTING
                                         (A-REG ALTERED)
SETGR      (-1216) [$F840] \SE\      MONITOR S/R- SET GRAPHIC MODE (GR). THIS INCLUDES SETTING TO MIXED
                                         MODE;CLEARING GRAPHICS PART OF SCREEN; AND RESETTNG
                                         WNDTOP~WNDLFT~WNDWDTH~WNCBDM & TABV (A-REG ALTERED)
SETHCOL      (-2324) [$F6EC] \SE\      APPLESOFT HI-RES - SET COLOR TO CONTENTS OF X-REG (MUST BE LESS THAN 8)
"SETHDR"      (-3810) [$F11E] \SE\      INTEGER BASIC ENTRY TO SET UP HEADER FOR SAVE/LOAD PARAMETERS
SETHRL      (-12288) [$D000] \SE\      HI-RES GRAPHICS INIT S/R CALL (ROM VERSION)
SETIFLG      (-378) [$FE86]      MONITOR MEMORY LOCATION 'SETIFLG'
SETINV      (-384) [$FE80] \SE\      MONITOR S/R TO SET VIDEO OUTPUT TO INVERSE
SETKBD      (-375) [$FE89]      MONITOR MEMORY LOCATION 'SETKBD'
SETMDZ      (-483) [$FE1D]      MONITOR MEMORY LOCATION 'SETMDZ'
SETMODE      (-488) [$FE18]      MONITOR MEMORY LOCATION 'SETMODE'
SETNORM      (-380) [$FE84] \SE\      MONITOR S/R TO SET VIDEO OUTPUT TO NORMAL (NOT INVERSE)
SETPG3      (-1367) [$FAA9]      AUTOSTART MONITOR MEMORY LOCATION 'SETPG3'
"SETPRPT"      (-8186) [$E006] \SE\      INTEGER BASIC ENTRY POINT TO SET UP '>' PROMPT
SETPWRC      (-1169) [$FB6F] \SE\      SET POWER CONDITION (AUTOSTART ROM ONLY)
SETTRK      (16002) [$3E82] \SM\      DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL - CODE SETS THE
                                         SLOT-DEPENDENT TRACK LOCATION
SETTRK      (-16747~-16722) [$BE95~$BEAE]      DOS 3.3 - SET TRACK #
SETTRK2      (16015) [$3E8F] \SM\      DOS 3.2 RWTS (READ-WRITE INTERIOR LABEL 'SETTRK2'
SETTXT      (-1223) [$FB39] \SE\      MONITOR S/R- SET SCREEN TO TEXT MODE. CLOBBERS ACCUMULATOR (A-REG ALTERED)
SETVID      (-365) [$FE93]      MONITOR MEMORY LOCATION 'SETVID'
SETWND      (-1205) [$FB4B] \SE\      MONITOR S/R- SET NORMAL LOW-RESOLUTION GRAPHICS WINDOW
SGN (FPSGN)      (-5232) [$EB90] \SE\      APPLESOFT FP - CALLS SIGN AND FLOATS THE RESULT IN THE FAC. FAC=+1 IF FAC
                                         WAS +;=0 IF FAC WAS 0;=-1 IF FAC WAS -
"SGN"      (-6308) [$E75C] \SE\      INTEGER BASIC ENTRY POINT TO GET SIGN OF A NUMBER
SHAPEL~SHAPEH      (26~27) [$001A~$001B] \P2\      HI-RES POINTER TO SHAPE LIST (ON-THE-FLY SHAPE POINTER)
SHAPEX      (81) [$0051] \P1\      HI-RES GRAPHICS SHAPE TEMP.
SHAPXL~SHAPXH      (808~809) [$0328~$0329] \P2\      START-OF-SHAPE-TABLE POINTER
SHLOAD      (-11335) [$D3B9] \SE\      HI-RES GRAPHICS SHLOAD S/R CALL
SHLOAD      (-2187) [$F775] \SE\      APPLESOFT HI-RES. LOADS SHAPE TABLE INTO MEMORY FROM TAPE ABOVE MEMSIZ
                                         (HIMEM) AND SETS POINTER AT $00E8

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SIGN	(47)	[\$002F]	\P1\	\$01 BIT SET AFTER CALL TO MULPM OR DIVPM (SIGNED 16 BIT MULT OR DIV) TO SPECIFY WHETHER COMPLEMENT NEEDED (NOTE MULPM & DIVPM IN OLD MONITOR ONLY - NOT IN AUTOSTART)
SIGN	(243)	[\$00F3]	\P1\	MONITOR & FLOATING POINT ROUTINES MEMORY LOC 'SIGN'
SIGN	(-5246)	[\$EB82]	\SE\	APPLESOFT FP - SETS A-REG ACCORDING TO VALUE OF FAC. ON EXIT A-REG=1 IF FAC > 0; A-REG=0 IF FAC=0; A-REG=\$FF IF FAC < 0 (X- Y-REGS NOT ALTERED)
SIN	(-4111)	[\$EFF1]	\SE\	APPLESOFT FP - COMPUTE THE SINE OF THE NUMBER IN FAC. RESULT TO FAC. MODIFIES INDEX CHARAC COMPTRTYP XORFPGN & MANY OTHER FP LOCNS
SLOOP	(-1351)	[\$FAB9]		AUTOSTART MONITOR MEMORY LOCATION 'SLOOP'
(SLOT #)	(2040)	[\$07F8]		CONTAINS SLOT NUMBER (IN THE FORMAT \$CS) OF THE PERIPHERAL CARD CURRENTLY ACTIVE - PRINT PEEK(2040)-192 YIELDS SLOT # IN DECIMAL FORMAT
SLOT	(1528+S)	[\$C5F8+S]	\P1\	DOS READ-WRITE-TRACK-SECTOR (RWTS) 'SLOT' = HOLDS SLOT NUMBER USED
SNGFLT	(-7423)	[\$E301]	\SE\	APPLESOFT - FLOAT THE UNSIGNED INTEGER IN Y-REG INTO FAC. RESETS VALTYP. (RESET Y-REG=0)
SOFTEV	(1010~1011)	[\$03F2~\$03F3]	\P2\	AUTOSTART ROM RESET VECTOR USED FOR SOFT ENTRY TO LANGUAGE IN USE - DEFAULT VALUE \$E003 FOR APPLESOFT
SPACE	(-2631)	[\$F5B9]		MINIASSEMBLER MEMORY LOCATION 'SPACE'
SPDBYT	(241)	[\$00F1]	\P1\	USED FOR SPEED CONTROL OF OUTPUT & DISPLAY. SPEED 0-255 (\$00-\$FF) CONTROLS INSERTED DELAY
SPKR	(-16336)	[\$C030]	\H1\	PEEK TO TOGGLE SPEAKER (PRODUCES A 'CLICK')
SPKR	(-16336~-16321)	[\$C030~\$C03F]	\H1\	SPEAKER TOGGLE FLIP FLOP. READ ONLY - DO NOT WRITE TO THES ADDRESSES WHICH ARE DECODED AS SAME SINGLE BIT LOCN
SPNT	(73)	[\$0049]	\P1\	USER STACK POINTER (S-REGISTER) SAVED HERE BY MONITOR 'SAVE' ROUTINE ON BRK & DURING TRACE
SQR (FPSQR)	(-4467)	[\$EE8D]	\SE\	APPLESOFT FP - TAKE SQUARE ROOT OF FAC. RESULT TO FAC. MODIFIES CHARAC INDEX AND MANY OTHER FP LOCNS
(SQR(.5))	(-5843~-5839)	[\$E92D~\$E931]	\P5\	APPLESOFT FP CONSTANT SQR(.5) = .707..
(SQR(2))	(-5838~-5834)	[\$E932~\$E936]	\P5\	APPLESOFT FP CONSTANT SQR(2) = 1.414...
SRCH2L~SRCH2H	(210~211)	[\$00D2~\$00D3]	\P2\	INTEGER BASIC MEMORY LOCATION 'SRCH2L' (SECOND VARIABLE SEARCH POINTER)
SRCHL~SRCHH	(208~209)	[\$00D0~\$00D1]	\P2\	INTEGER BASIC MEMORY LOCATION 'SRCHL' (POINTER TO SEARCH VARIABLE TABLE)
STAT	(2040+S)	[\$07F8+S]	\P1\	APPLE COMMUNICATIONS INTERFACE CARD IN SLOT #S - STATUS (SEE ACIC MANUAL PG 17). E.G. POKE 2040+S~17
STATUS	(72)	[\$0048]	\P1\	USER STATUS REGISTER (P-REGISTER) SAVED HERE ON BRK TO MONITOR & DURING TRACE. WARNING: INITIALIZE BEFORE G FUNCTION TO AVOID DECIMAL MODE IF DOS HAS BEEN USED
STATUS	(1400+S)	[\$0578+S]	\P1\	EXAMPLE: APPLE SERIAL INTERFACE IN SLOT #S: PARITY CHECKSUM OPTIONS (SEE MANUAL)
STBITS	(1272+S)	[\$04F8+S]	\P1\	EXAMPLE: APPLE SERIAL INTERFACE IN SLOT #S: CONTAIN NUMBER OF STOP BITS (INCLUDING 1 PARITY BIT)
STEP	(-1469)	[\$FA43]		MONITOR S/R- PERFORM A SINGLE STEP (NOT AVAILABLE WITH AUTOSTART ROM). EXECUTES ONE INSTRUCTION AT (PCL'H) WITH REGISTER RESTORE BEFORE; REGISTER SAVE AFTER; UPDATE OF PCL'H; DISPLAY OF INSTRUCTION & DISPLAY OF RESULT REGISTERS
STEP2	(-316)	[\$FEC4]		MONITOR MEMORY LOCATION 'STEP2'
~STEP~	(-3463)	[\$F279]	\SE\	INTEGER BASIC ENTRY TO ROUTINE TO HANDLE STEP FUNCTION FOR FOR/NEXT LOOP
STILLON	(15646)	[\$3D1E]	\SL\	DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL STARTS CODE WHICH SENSES IF MOTOR STILL ON
STITLE	(-1179)	[\$FB65]		AUTOSTART MONITOR MEMORY LOCATION 'STITLE'
STKINI	(-10621)	[\$D683]	\SE\	APPLESOFT STACK INITIALIZATION - CLEARS THE STACK
STOADV	(-1040)	[\$FBF0]	\SE\	MONITOR - LOAD Y FROM CH; STORE A-REG TO SCREEN AT (BASL)~Y; AND GOTO ADVANCE (\$FBF4) (A- Y-REG ALTERED)

SIGN - STOADV

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NAME (DEC LOCN) [HEX LOCN] \USE-TYPE\ - DESCRIPTION

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"STOPPED AT" (-5949) [$E8C3] \SE\ INTEGER BASIC ENTRY TO ROUTINE TO PRINT 'STOPED AT LINE #'
STOR (-501) [$FE0B] MONITOR MEMORY LOCATION 'STOR'
STREND (109~110) [$006D~$006E] \P2\APPLESOFT STORAGE END POINTER (POINTS TO TOP OF ARRAY STORAGE I.E. TO END OF
NUMERIC STORAGE IN USE)
STRINI (-7211) [$E3D5] \SE\ APPLESOFT - GET SPACE FOR CREATION OF A STRING & CREATE DISCRIPTOR FOR IT IN
DSCTMP. ON ENTRY A-REG = LEN OF STRING.
STRLIT (-7193) [$E3E7] \SE\ APPLESOFT - STORE A QUOTE IN ENDCHR AND CHARAC SO THAT STRLT2 WILL STOP ON IT
STRLT2 (-7187) [$E3ED] \SE\ APPLESOFT - BUILD DESCRIPTOR FOR STRING LITERAL WHOSE 1ST CHAR POINTED TO BY Y-REG
(MSB) & X-REG (LSB). PUT INTO TEMPORARY & POINTER TO IT IN FACMO~FACLO.
STRNG1 (171~172) [$00AB~$00AC] \P2\APPLESOFT POINTER TO A STRING USED IN 'MOVINS' STRING UTILITY
STRNG2 (173~174) [$00AD~$00AE] \P2\APPLESOFT POINTER TO A STRING USED IN STRLT2 STRING UTILITY
STROUT (-9414) [$DB3A] \SE\ APPLESOFT - PRINT STRING POINTED TO BY Y-REG (MSB) & A-REG (LSB). STRING MUST END
WITH A ZERO OR QUOTE
STRPRT (-9411) [$DB3D] \SE\ APPLESOFT - PRINT A STRING WHOSE DESCRIPTOR IS POINTED TO BY FACMO~FACLO
STRSPA (-7203) [$E3DD] \SE\ APPLESOFT - JSR TO GETSPA. STORE THE POINTER & LENGTH IN DSCTMP.
STRTXT (-8575) [$DE81] \SE\ APPLESOFT - SET Y-REG (MSB) & X-REG (LSB) TO TXTPTR + CARRY BIT AND FALL INTO STRLIT
STXTPT (-10601) [$D697] \SE\ APPLESOFT INITIALIZATION - SET TXTPTR TO BEGINNING OF PROGRAM
SUBFLG (20) [$0014] APPLESOFT SUBSCRIPT FLAG: $00= SUBSCRIPTS ALLOWED;$80= SUBSCRIPTS NOT ALLOWED
SUBTBL (-29) [$FFE3] 'SUBTBL' L.S.B. ADDRESS-1 OF BASCONT SUBROUTINE
SUBTBL (-29~-23) [$FFE3~$FFE9] \PB\TABLE OF SUBROUTINE ADDRESSES -1 (INDEX PC WITH TBL ITEM FOR S/R ENTRY): (ADDRESS
MSB = $FE; LSB = TABLE ENTRY +1)
"SUBTRACTION" (-6270) [$E782] \SE\ INTEGER BASIC ENTRY POINT TO SUBTRACTION FUNCTION
SYNCHR (-8512) [$DECO] \SE\ APPLESOFT SYNTAX CHARACTER CHECK - CHECKS TO VERIFY TXTPTR POINTS TO SAME CHARACTER
AS THAT IN A-REG. NORMAL EXIT THRU CHGET TO GET NEX CHAR FROM INPUT BUFFER OTHERWISE
SYNTAX ERROR. TXTPTR NOT MODIFIED. (Y-REG RESET TO ZERO)
SYNPAGL~SYNPAGH (254~255) [$00FE~$00FF] INTEGER BASIC SYNTAX PAGE POINTER. IF $00FF NOT ZERO THEN ERROR CONDITION
EXISTS
SYNSTKDX (253) [$00FD] \P1\ INTEGER BASIC MEMORY LOCATION 'SYNSTKDX' (SYNTAX STACK INDEX VALUE)
SYNSTKH (88) [$0C58] INTEGER BASIC MEMORY LOCATION 'SYNSTKH'
SYNSTKL (128~159) [$0080~$009F] INTEGER BASIC MEMORY LOCATION 'SYNSTKL' (SYNTAX STACK LOCATION)
"SYNTABL" (-5120~-4609) [$EC00~$EDFF] \PB\INTEGER BASIC SYNTAX TABLE
(TABLE1 DOS 3.2.1) (-17780) [$BA8C] \SB\DOS 3.2.1 RWTS OPERATION TIMER ROUTINE TABLE1
TABV (-1189) [$FB5B] \SE\ PLACE CURSOR AT LINE (A-REG) COLUMN (CH) SETTING CV AND BASL~H FROM A-REG
(A-REG ALTERED)
"TAB" (-6236) [$E7A4] \SE\ INTEGER BASIC ENTRY POINT TO HORIZONTAL TAB FUNCTION
TAN (-4038) [$F03A] \SE\ APPLESOFT FP - COMPUTE THE TANGENT OF THE NUMBER IN FAC. RESULT TO FAC.
MODIFIES CHARAC INDEX XORFPSGN AND MANY OTHER FP LOCNS
TAPEIN (-16288) [$C060] MONITOR MEMORY LOCATION 'TAPEIN'
TAPEIN [$C060/8] \H1\ STATE OF 'CASSETTE DATA IN' APPEARS IN BIT 7
TAPEOUT (-16352) [$C020] \H1\ PEEK TO TOGGLE CASSETTE OUTPUT (CREATE A 'CLICK' ON RECORDING)
TAPEOUT (-16352~-16337) [$C020~$C02F] \H1\CASSETTE OUTPUT TOGGLE FLIP FLOP. READ ONLY DO NOT WRITE TO THESE ADDRESSES
WHICH ARE DECODED AS SAME SINGLE BIT LOCN
TEMP (44~45) [$002C~$002D] \P2\ DOS RWTS (READ-WRITE TRACK-SECTOR TEMPORARY STORAGE FOR ADDRESS INFORMATION
TEMP1 (147~151) [$0093~$0097] \P5\ APPLESOFT REGISTER TEMP1 FOR FLOATING POINT MATH PACKAGE (PACKED 5-BYTE FORMAT)
TEMP2 (152~156) [$0098~$009C] \P5\ APPLESOFT FLOATING POINT MATH PACKAGE REGISTER TEMP2 (PACKED 5-BYTE FORMAT)
TEMP3 (138~142) [$008A~$008E] \P5\ APPLESOFT REGISTER TEMP3 FOR FLOATING POINT MATH PACKAGE (PACKED 5-BYTE FORMAT)
TEMPTT (82) [$0052] \P1\ APPLESOFT TEMPORARY POINT - LAST USED TEMPORARY STRING DESCRIPTOR (SEE DSCTMP)
(TEXTLN0) [$0400~$0427] \BB\ VIDEO SCREEN BUFFER TEXT LINE 0
(TEXTLN1) [$0480~$04A7] \BB\ VIDEO SCREEN BUFFER TEXT LINE 1
(TEXTLN10) [$0528~$054F] \BB\ VIDEO SCREEN BUFFER TEXT LINE 10
(TEXTLN11) [$05A8~$05CF] \BB\ VIDEO SCREEN BUFFER TEXT LINE 11

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(TEXTLN12) [$0628-$064F] \BB\ VIDEO SCREEN BUFFER TEXT LINE 12
(TEXTLN13) [$06A8-$06CF] \BB\ VIDEO SCREEN BUFFER TEXT LINE 13
(TEXTLN14) [$0728-$074F] \BB\ VIDEO SCREEN BUFFER TEXT LINE 14
(TEXTLN15) [$07A8-$07CF] \BB\ VIDEO SCREEN BUFFER TEXT LINE 15
(TEXTLN16) [$0450-$047F] \BB\ VIDEO SCREEN BUFFER TEXT LINE 16
(TEXTLN17) [$04D0-$04FF] \BB\ VIDEO SCREEN BUFFER TEXT LINE 17
(TEXTLN18) [$0550-$057F] \BB\ VIDEO SCREEN BUFFER TEXT LINE 18
(TEXTLN19) [$05D0-$05FF] \BB\ VIDEO SCREEN BUFFER TEXT LINE 19
(TEXTLN2) [$0500-$052F] \BB\ VIDEO SCREEN BUFFER TEXT LINE 2
(TEXTLN20) [$0600-$067F] \BB\ VIDEO SCREEN BUFFER TEXT LINE 20
(TEXTLN21) [$06D0-$06FF] \BB\ VIDEO SCREEN BUFFER TEXT LINE 21
(TEXTLN22) [$0750-$077F] \BB\ VIDEO SCREEN BUFFER TEXT LINE 22
(TEXTLN23) [$07D0-$07FF] \BB\ VIDEO SCREEN BUFFER TEXT LINE 23
(TEXTLN3) [$0580-$05AF] \BB\ VIDEO SCREEN BUFFER TEXT LINE 3
(TEXTLN4) [$0600-$062F] \BB\ VIDEO SCREEN BUFFER TEXT LINE 4
(TEXTLN5) [$0680-$06AF] \BB\ VIDEO SCREEN BUFFER TEXT LINE 5
(TEXTLN6) [$0700-$072F] \BB\ VIDEO SCREEN BUFFER TEXT LINE 6
(TEXTLN7) [$0780-$07AF] \BB\ VIDEO SCREEN BUFFER TEXT LINE 7
(TEXTLN8) [$0428-$044F] \BB\ VIDEO SCREEN BUFFER TEXT LINE 8
(TEXTLN9) [$04A8-$04CF] \BB\ VIDEO SCREEN BUFFER TEXT LINE 9
(TEXTMACROLINE2) (1280-1399) [$0500-$057F] \HB\TEXTVIDEO DISPLAY - SUBPAGE 2. CONSISTS OF TEXT LINES 2-10 & 18
FOLLOWED BY AN 8-BYTE BLOCK FOR I-O PERIPHERALS
TEXTTAB (103-104) [$0067-$0068] \P2\ APPLESOFT TEXT TABLE POINTER (POINTS TO BEGINNING OF PROGRAM TEXT . DEFAULT
VALUE $0801
(TIMER DOS 3.1-3.2) (-17793) [$BA7F] \SB\DOS 3.1-3.2 RWTS OPERATION TIMER ROUTINE
(TIMER DOS 3.2.1) (-17797) [$BA7B] \SB\DOS 3.2.1 RWTS OPERATION TIMER ROUTINE
TITLE (-1271) [$FB09] AUTOSTART MONITOR MEMORY LOCATION 'TITLE'
"TO/FOR" (-5808) [$E950] \SE\ INTEGER BASIC ENTRY POINT TO ROUTINE TO HANDLE LOOP COUNTER # TO # STEP #
TOKNDX (241) [$0CF1] \P1\ INTEGER BASIC MEMORY LOCATION 'TOKNDX' (TOKEN INDEX VALUE)
TOKNDXSTK (209-240) [$00D1-$00F0] INTEGER BASIC MEMORY LOCATION 'TOKNDXSTK' ('TOKEN INDEX STACK?')
(TOOCOMPLEX) (-7120) [$E430] \SE\ APPLESOFT - PRINT "FORMULA TOO COMPLEX" THEN HALT AT APPLESOFT (J) LEVEL
TOSUB (-66) [$FFBE] MONITOR & MINIASSEMBLER MEMORY LOCATION 'TOSUB'
TRACE (-318) [$FEC2] \SE\ CALL TO PERFORM MONITOR TRACE
"TRACEIT" (-3715) [$F17D] \SE\ INTEGER BASIC ENTRY TO ROUTINE TO EXECUTE THE TRACE FUNCTION
"TRACE" (-3727) [$F171] \SE\ INTEGER BASIC ENTRY TO ROUTINE TO SET TRACE MODE FOR EXECUTION
TRACK - TRKN (46) [$0C2E] \P1\ DOS RWTS (READ-WRITE TRACK-SECTOR) TRACK NUMBER
TRKCNT (65) [$0041] \P1\ DOS DISK SYSTEM FORMATTER SPECIAL TRACK COUNTER
TRKDON (16243-16340) [$3F73-$3FD4] \SB\DOS 3.2 DISK FORMATTER CHECK TRACK FORMATTING ROUTINE
TRKDON (-4237) [$EF73] \SE\ DOS 3.2 DISK FORMATTER INTERIOR LABEL AT POINT WHERE TRACK FORMATTING IS DONE
AND CHECKING OF THAT FORMATTING BEGINS
TRKFRM (16046) [$3EAE] \SL\ DOS 3.2 DISK FORMATTER LABEL AT POINT WHERE TRACK FORMATTING BEGINS
TRYADR (15776) [$3DA0] \SL\ DOS 3.2 RWTS (READ-WRITE TRACK SECTOR) INTERIOR LABEL 'TRYADR'
TRYADR2 (15784) [$3DA8] \SL\ DOS 3.2 RWTS (READ-WRITE TRACK SECTOR) INTERIOR LABEL 'TRYADR2'
TRYNEXT (-2724) [$F55C] MINIASSEMBLER MEMORY LOCATION 'TRYNEXT'
TRYTRK (15754) [$3D8A] \SL\ DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL - TRY DISK TRACK AS PART
OF LOCATING CORRECT SECTOR FOR READ
TRYTRK (-16981-16965) [$BDAB-$BDBB] \SB\DOS 3.3 - GET COMMAND CODE. IF NULL EXIT VIA 'ALLDONE' ($BE46) TURNING OFF
DRIVE & RETURNING TO CALLER. IF COMMAND CODE=4 BRANCH TO 'FORMDSK' ($BEDD);
OTHERWISE MOVE LOW BIT INTO CARRY (SET=READ;CLEAR=WRITE) AND SAVE VALUE ON
STATUS REG. IF WRITE OPN DATA IS PRENIBBILIZED VIA 'PRENIB16' ($B800)
TRYTRK2 (15771) [$3D9B] \SL\ DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL 'TRYTRK2'

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NAME (DEC LOCN) [HEX LOCN] \USE-TYPE\ - DESCRIPTION

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(TWO PI) (-3989~-3985) [$F06B~$F06F] \P5\APPLESOFT 5-BYTE FLOATING POINT CONSTANT 2*PI = 6.2832...
TXTCLR (-16304) [$C050] \H1\ POKE TO 0 TO SET FROM TEXT TO GRAPHICS MODE W/O CLEARING SCREEN
TXTNDX (200) [$00C8] INTEGER BASIC MEMORY LOCATION 'TXTNDX' (TEXT INDEX VALUE)
TXTNDXSTK (168~199) [$00A8~$00C7] INTEGER BASIC MEMORY LOCATION 'TXTNDXSTK' (TEXT INDEX STACK)
TXTPTR (184~185) [$00B8~$00B9] \P2\ TXTPTR - POINTS AT NEXT CHAR OR TOKEN FROM PROG (C/A DEC 78)
TXTSET (-16303) [$C051] \H1\ POKE TO 0 TO SET FROM GRAPHICS TO TEXT MODE W/O RESETTNG SCROLLING WINDOW
(UNDEF'D STMT PRT) (-9860) [$D97C] APPLESOFT - PRINT "UNDEF'D STATEMENT" THEN HALT AT APPLESOFT (J) LEVEL
"UNPACK" (-8083) [$E06D] \SE\ INTEGER BASIC ENTRY POINT TO UNPACK TOKENED CODE TO MNEMONICS
UP ~ CURSUP (-998) [$FC1A] \SE\ MONITOR S/R TO MOVE CURSOR UPWARD (IF POSSIBLE) (A-REG ALTERED)
USR (-310) [$FECA] MONITOR MEMORY LOCATION 'USR'
USRADR (1016) [$03F8] IN MONITOR MODE KEYBOARD ENTRY OF CTL-Y WILL CAUSE JSR HERE
V2 (45) [$002D] \P1\ BOTTOM PT OF LO-RES VERT LINE DRAWN BY VLINE. RANGE: 0-19($21) FOR MIXED SCR;
0-23($17) FOR FULL SCR

"VALGETL~VALGETH" (206~207) [$00CE~$00CF] \P2\INTEGER BASIC PRIMARY EVALUATOR TEMPORARY LOCATION
"VALL~VALH" (206~207) [$00CE~$00CF] \P2\INTEGER BASIC 16-BIT TEMPORARY VALUE FOR MATHEMATICAL OPERATIONS
VALTYP (17) [$0011] APPLESOFT FLAG FOR LAST FAC (FLOATING ACCUMULATOR) OPERATION: $00 = NUMBER;
$FF=STRING

VARPNT (131~132) [$0083~$0084] \P2\ APPLESOFT POINTER TO THE LAST-USED VARIABLE'S VALUE (USED BY PTRGET)
VARTAB: (105~106) [$0069~$006A] \P2\ APPLESOFT VARIABLE TABLE POINTER - POINTS TO TO START OF SIMPLE VARIABLE SPACE
(AT END OF APPLESOFT PROGRAM TEXT)
VARTIO (-10000) [$D8FC] \SE\ APPLESOFT CASSETTE - SET UP A1 & A2 TO SAVE 3 BYTES ($0050~$0052) FOR LENGTH
"VERBADL" (-5616~-5497) [$EA10~$EA87] \PB\INTEGER BASIC VERB DISPATCH TABLE LOW BYTE
"VERBADRH" (-5496) [$EA88] \PB\ INTEGER BASIC VERB DISPATCH TABLE HI BYTE
VERBNOW (214) [$00D6] \P1\ INTEGER BASIC MEMORY LOCATION 'VERBNOW' (VERB CURRENTLY IN USE)
VFY (-458) [$FE36] \SE\ MONITOR S/R TO PERFORM A MEMORY VERIFY (A1-A2 TO A4)
VFYOK (-424) [$FE58] MONITOR MEMORY LOCATION 'VFYOK'
VIDOUT (-1027) [$FBFD] \SE\ MONITOR S/R- OUTPUT A-REGISTER AS ASCII ON TEXT SCREEN OR PROCESS CONTROL
CHARACTER. IF (A)<$80 GOTO STOADV; =$87 SOUND BELL; =$88 GOTO BS; =$8A GOTO
LF; =$8D GOTO CR; >$9F GOTO STOADV; OTHERWISE IGNORE ENTRY SCREEN RTS 1
AUTOSTART MONITOR MEMORY LOCATION 'VIDWAIT'
VIDWAIT (-1160) [$FB78] LO-RES PLOT VERT LINE AT X-COORD = (Y-REG) AND Y-COORD FROM (A-REG) THRU
VLINE (-2008) [$F828] \SE\ ($002D) (A-REG ALTERED)
VLINEZ (-2010) [$F826] \SE\ LO-RES PLOT VERTICAL LINE AT X-COORD = (Y-REG) AND Y-COORD FROM
(A-REG)+1+CARRY THRU ($002D) (A-REG ALTERED)
"VLIN" (-4410) [$EEC6] \SE\ INTEGER BASIC ENTRY POINT TO DRAW A LO-RES VERTICAL LINE
VOLUME (47) [$002F] \P1\ DOS RWTS (READ-WRITE TRACK-SECTOR) DISK VOLUME NUMBER
VTAB (-990) [$FC22] \SE\ PERFORM A VERTICAL TAB TO ROW SPECIFIED IN A-REG ($0~$17). SET BASL~H FROM CV
(AND WNDLFT) (A-REG ALTERED)
VTABZ (-988) [$FC24] \SE\ SET BASL~H FROM (A-REG) AND WNDLFT WITHOUT REGARD TO CV (A-REG ALTERED)
"VTAB" (-4521) [$EE57] \SE\ INTEGER BASIC ENTRY TO VERTICAL TAB FUNCTION
WAIT (-856) [$FCA8] \SE\ CALL FOR WAIT LOOP. WAIT ESTIMATED AT 2.5A^2+13.5A+13 WAIT CYCLES OF 1.02
MICROSECONDS WHERE A IS CONTENTS OF A-REG WHEN S/R CALLED
WAIT2 (-855) [$FCA9] MONITOR MEMORY LOCATION 'WAIT2'
WAIT3 (-854) [$FCAA] MONITOR MEMORY LOCATION 'WAIT3'
WBYTE (16315) [$3FBB] \SL\ DOS 3.2 DISK FORMATTER INTERIOR LABEL AT BEGINNING OF TIGHT TIMING ROUTINE
WINBLB2 (16331) [$3FCB] \SL\ DOS 3.2 DISK FORMATTER INTERIOR LABEL 'WINBLB2'
WINBLC (-4147) [$EFCB] \SL\ DOS 3.2 DISK FORMAT INTERIOR LABEL 'WINBLC'
WLOOP (16256) [$3F80] \SL\ DOS 3.2 DISK FORMATTER INTERIOR LABEL AT BEGINNING OF 26 MICROSECOND WAIT LOOP
WNOBTM (35) [$0023] \P1\ BOTTOM LINE OF SCROLL WINDOW: RANGE (WNDTOP)+1 TO 24($18).
WNOBFT (32) [$0020] \P1\ LEFT COLUMN OF SCROLL WINDOW: RANGE 0-39 OR $0~$27. USED ONLY IN VTABZ.
WNOBFT (34) [$0022] \P1\ TOP LINE OF SCROLL WINDOW: RANGE 0-22($16) FOR FULL TEXT SCREEN 20-22($14~$16)
FOR MIXED SCREEN

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NAME (DEC LOCN) [HEX LOCN] \USE-TYPE\ - DESCRIPTION

WNDWDTH (33) [\$0021] \P1\ WIDTH OF THE SCROLL WINDOW: RANGE:1 TO 40-(WNDLFT) OR \$1 TO \$28 - (WNDLFT)

WNIBLA (16330) [\$3FCA] \SL\ DOS 3.2 DISK FORMATTER INTERIOR LABEL 'WNIBLA'

WR1 (-300) [\$FED4] MONITOR MEMORY LOCATION 'WR1'

WRBIT (-810) [\$FCD6] MONITOR - WRITES A BIT TO CASSETTE TAPE (CALLED BY WRBYTE AND HEADR)

WRBYT2 (-273) [\$FEEF] MONITOR MEMORY LOCATION 'WRBYT2'

WRBYTE (-275) [\$FEED] MONITOR - USES WRBIT TO WRITE 10 BITS TO CASSETTE TAPE

WRIT (15922) [\$3E32] \SL\ DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL AT START OF CODE TO WRITE NIBBLES TO DISK IF NOT WRITE PROTECTED

WRIT (-16815~-16807) [\$BE51~\$BE59] DOS 3.3 - WRITE A SECTOR USING 'WRITE16' (\$B82A); IF GOOD WRITE EXIT VIA 'ALLDONE' (\$BE46) OTHERWISE LOAD A-REG WITH \$10 (WRITE PROTECT ERROR) AND EXIT VIA 'HNDLERR' (\$BE48)

WRIT2 (16098) [\$3EE2] \SL\ DOS 3.2 DISK FORMATTER INTERIOR LABEL 'WRIT2'

WRIT3 (16103) [\$3EE7] \SL\ DOS 3.2 DISK FORMATTER INTERIOR LABEL 'WRIT3'

WRITE (-18326~-18180) [\$B86A~\$B8FC] \SB\DOS 3.1~3.2~3.2.1 (SEE \$B82A FOR DOS 3.3 'WRITE') RWTS (READ-WRITE TRACK-SECTOR) WRITE MODULE. WRITES A BUFFER OF 410 (\$19A) 5-BIT RIGHT-JUSTIFIED NIBBLES ONTO THE DISK SURFACE AS A SECTOR CONVERTING THEM TO A 8-BIT 'DISK BYTE' FORMAT FIRST

WRITE (-307) [\$FECF] \SE\ MONITOR S/R TO WRITE DATA FROM MEMORY TO CASSETTE TAPE - FIRST MEMORY LOCATION POINTED TO BY A1L'H (\$003C~\$003D); LAST BY A2L'H (\$003E~\$003F). CASSETTE TAPE GETS 10 SECONDS OF TONE HEADER THEN THE DESIGNATED DATA BITS AND ONE CHECKSUM BYTE

WRITE16 (DOS 3.3) (-18390~-18249) [\$B82A~\$B8B7] \SB\DOS 3.3 'WRITE'. WRITES PRENIBBILIZED DATA FROM PRIMARY & SECONDARY BUFFERS TO DISK; CALLS WRITE-A-BYTE S/R; WRITES 5 BYTES AUTSYNC STARTING DATA MARKS (\$D5~\$AA~\$AD) 342 BYTES DATA ONE BYTE CHECKSUM AND CLOSING DATA MARKS (\$DE~\$AA~\$EB). USES WRITE TRANSLATE TABLE (\$BA29). ON ENTRY X-REG CONTAINS SLOT#*16. ON EXIT X-REG UNCHANGED; Y-REG \$00; CARRY CLEAR. USES \$0026~\$0027~\$678

WRITSF (16102) [\$3EE6] \SL\ DOS 3.2 DISK FORMATTER INTERIOR LABEL 'WRITSF'

WRNIBL (-4146) [\$EFCE] \SL\ DOS 3.2 DISK FORMAT INTERIOR LABEL 'WRNIBL'

WRTAPE (-795) [\$FCE5] MONITOR MEMORY LOCATION 'WRTAPE'

WTRK (16068) [\$3EC4] \SL\ DOS 3.2 DISK FORMATTER - LABEL AT POINT WHERE WRITE OF FORMATTING INFO ONTO TRACK BEGINS -- A HIGHLY TIMING-SENSITIVE AREA OF CODE

XOL~XOH (800~801) [\$0320~\$0321] \P2\ HI-RES GRAPHICS- PRIOR X-COORD SAVE AFTER HLIN OR HPLT

X1 (248) [\$00F8] OLD (NON-APPLESOFT) FLOATING POINT ROUTINES FLOATING POINT ACCUMULATOR FP1 MEMORY LOC 'X1' (EXPONENT)

X2 (244) [\$00F4] \P1\ MONITOR & OLD (NON-APPLESOFT) FLOATING POINT ROUTINES FLOATING POINT ACCUMULATOR 2 MEMORY LOC 'X2' (EXPONENT)

XAM (-589) [\$FDB3] \SE\ MONITOR S/R TO EXAMINE CONTENTS OF MEMORY FROM (A1L~A1H) TO (A2L~A2H). Y-REG=0 BEFORE CALL (A-REG ALTERED)

XAM8 (-605) [\$FDA3] \SE\ MONITOR S/R TO EXAMINE 8 MEM LOCNS. PRINTS HEX OF MEMORY FROM XXXX TO XXX7 WHERE XXXX IS CONTENTS OF A1L~A1H; Y-REG MUST =0 ON ENTRY (A-REG ALTERED)

XAMPM (-570) [\$FDC6] MONITOR MEMORY LOCATION 'XAMPM'

XBASIC (-336) [\$FEB0] \SE\ MONITOR S/R TO JUMP TO BASIC

XBRK (-1380) [\$FA9C] MONITOR MEMORY LOCATION 'XBRK'

XDRAW (-2467) [\$F65D] \SE\ APPLESOFT HI-RES - DRAW SHAPE POINTED TO BY Y-REG(MSB)&X-REG(LSB) BY INVERTING EXISTING COLOR OF DOTS SHAPE DRAWS OVER. A-REG = ROT FACTOR

XJMP (-1340) [\$FAC4] MONITOR MEMORY LOCATION 'XJMP'

XJMPAT (-1339) [\$FAC5] MONITOR MEMORY LOCATION 'XJMPAT'

XJSR (-1351) [\$FAB9] MONITOR MEMORY LOCATION 'XJSR'

XQ1 (-1416) [\$FA78] MONITOR MEMORY LOCATION 'XQ1'

WNDWDTH - XQ1

Prof. Luebbert's "What's Where in the Apple"

ALPHABETICAL GAZETTEER

NAME (DEC LOCN) [HEX LOCN] \USE-TYPE\ - DESCRIPTION

XQ2	(-1414) [\$FA7A]	MONITOR MEMORY LOCATION 'XQ2'
XQINIT	(-1458) [\$FA4E]	MONITOR MEMORY LOCATION 'XQINIT'
XQT/XQTNZ	(60~67) [\$003C~\$0043] \PB\	8 BYTE WORK AREA FOR INSTRUCTION STEP/TRACE. NEXT INSTRUCTION SOMETIMES MOVED HERE
XREG	(70) [\$0046] \P1\	USER X-REG SAVED HERE ON BRK TO MONITOR & DURING TRACE
XRTI	(-1371) [\$FAA5]	MONITOR MEMORY LOCATION 'XRTI'
XRTS	(-1367) [\$FAA9]	MONITOR MEMORY LOCATION 'XRTS'
XSAVE	(216) [\$00C8] \P1\	INTEGER BASIC MEMORY LOCATION 'XSAVE' (TEMPORARY STORAGE FOR CONTENTS OF X-REGISTER)
XTNDL~XTNDH	(82~83) [\$0052~\$0053] \P2\	OLD MONITOR (NOT AUTOSTART) - USED IN 16-BIT MULT & DIVIDE AS ACCUMULATOR EXTENSION (TO 32 BITS)
XTOY	(15995) [\$3E7B] \DL\	DOS 3.2 RWTS (READ-WRITE TRACK-SECTOR) INTERIOR LABEL 'XTOY'
XTOY	(-16754~-16748) [\$BE8E~\$BE94]	DOS 3.3 - X-REG/16 =>Y-REG. USED TO PUT SLOT INTO Y-REG
YO	(802) [\$0322] \P1\	HI-RES GRAPHICS YO - MOST RECENT Y-COORDINATE
YCNT	(71) [\$0047] \P1\	DOS DISK SYSTEM FORMATTER NYBBLE COUNTER (ALSO COUNTER FOR DISK-DRIVE MOTOR-ON TIME?)
YREG	(71) [\$0047] \P1\	USER Y-REG SAVED HERE ON BRK TO MONITOR & DURING TRACE (Y-REG SAVED HERE ON BRK)
YSAV	(52) [\$0034] \P1\	USED BY MONITOR COMMAND PROCESSOR TO SAVE CONTENTS OF Y-REGISTER DURING PROCESSOR (Y-REGISTER SAVE LOCN FOR MONITOR)
YSAV1	(53) [\$0035] \P1\	USED TO SAVE CONTENTS OF Y-REGISTER ACROSS A CALL TO SCREEN OUTPUT ROUTINES. (Y-REGISTER SAVE LOCN FOR COUT1)
YTEMP	(201) [\$00C9]	INTEGER BASIC MEMORY LOCATION 'YTEMP' (TEMPORARY STORAGE FOR Y-REGISTER)
ZERDLY	(-805) [\$FCDB]	MONITOR MEMORY LOCATION 'ZERDLY'
ZMODE	(-132) [\$FF7C]	MONITOR & MINIASSEMBLER MEMORY LOCATION 'ZMODE'
ZMODE	(-57) [\$FFC7]	MONITOR MEMORY LOCATION 'ZMODE'
ZPGBM3 ZPGFCB	(67~67) [\$0043~\$0043]	DOS - USED AS GENERAL PURPOSE POINTER BY SECOND-LEVEL DOS ROUTINES
