

Memory Map:

0000 - 3FFF Module ROM - 16K
 4000 - 47FF User RAM - 2K
 4000 4007 Reserve Memory pointers
 4008 4021 Menu 1
 4022 403B Menu 2
 403C 4055 Menu 3
 4056 40C3 Function Key Definitions
 40C4 0 to mark end of function key definitions
 40C5 47FF Program (Variable) Memory
 4800 - 6FFF Module RAM
 7000 - 75FF Duplicate of 7600 - 7BFF
 7600 - 76FF Display Chip 1 & 3
 7600 764D LCD Display Sections 1 & 3
 764F Indicator
 Bit 0 Busy
 Bit 1 Shift
 Bit 2 Japanese
 Bit 3 Small
 Bit 4 III
 Bit 5 II
 Bit 6 I
 Bit 7 Def
 76AF Indicator
 Bit 0 De
 Bit 1 G
 Bit 2 Rad
 Bit 3
 Bit 4 Reserve
 Bit 5 Prn
 Bit 6 Run
 Bit 7
 7650 765F E\$
 7660 766F F\$
 7670 767F G\$
 7680 768F H\$
 7690 769F I\$
 76A0 76AF J\$
 76B0 76BF K\$
 76C0 76CF L\$
 76D0 76DF M\$
 76E0 76EF N\$
 76F0 76FF O\$
 7700 - 77FF Display Chips 2 & 4
 7700 774D LCD Display Sections 2 & 4
 774E 774F Not used
 7750 775F P\$
 7760 776F Q\$
 7770 777F R\$
 7780 778F S\$
 7790 779F T\$
 77A0 77AF U\$
 77B0 77BF V\$
 77C0 77CF W\$
 77D0 77DF X\$
 77E0 77EF Y\$
 77F0 77FF Z\$
 7800 - 7BFF System Memory - 1K
 7800 78BF System Memory 192 Bytes
 7863 RAM top - High order 8 bits
 7864 RAM bottom - High order 8 bits
 7865 7866 Beginning of BASIC program
 7867 7868 End of BASIC program
 7869 786A Head address of a BASIC program to perform editing based on keyboard entries
 786B Beep On/Beep off
 7875 LCD Cursor Position
 7879 Cassette parameter F/F
 7880 LCD display parameter F/F
 7890 7893 Used by RIGHT\$, LEFT\$, MID\$
 7894 String Buffer Pointer 7894 = 10H
 7899 789A Start of variable storage area
 789B Error Code = ERR2 + 1
 7900 790F A\$
 7910 791F B\$
 7920 792F C\$
 7930 793F D\$
 7940 794F E\$
 7950 795F F\$
 7960 796F G\$
 7970 797F H\$
 7980 798F I\$
 7990 799F J\$
 79A0 79AF K\$
 79B0 79BF L\$
 79C0 79CF M\$
 79D0 79DF N\$
 79E0 79EF O\$
 79F0 79FF P\$
 7900 7907 S
 7908 790F T
 7910 7917 U
 7918 791F V
 7920 7927 W
 7928 792F X
 7930 7937 Y
 7938 793F Z
 7940 7947
 7948 794F
 7950 7957
 7958 795F
 7960 7967
 7968 796F
 7970 7977
 7978 797F
 7980 7987
 7988 798F
 7990 7997
 7998 799F
 79A0 79A7
 79A8 79AF
 79B0 79BF
 79B8 79BF
 79C0 79CF
 79C8 79CF
 79D0 - 7BFF System Memory - 560 Bytes
 79E0 79E1 Printer X axis position relative to origin
 79E2 79E3 Printer Y axis position relative to origin
 79E4 79E5
 79E6 Printer HORIZONTAL value
 79E7 79E8
 79E9 Printer pen up/down
 79EA Printer line type

79EB 79EF
 79F0 Printer Text/Graphic mode
 79F1
 79F2 Printer ROTATE value
 79F3 Printer pen color
 79F4 Printer CSIZE
 7A00 7A07 Numeric Data Buffer or String pointer
 7A10 7A17 Numeric Data Buffer or String pointer
 7B10 7B4F String Buffer
 7B60 7B67 Tape out Synchronization header
 7B68 Tape out file mode
 7B69 7B78 Tape out file name
 7B79 7B84 Tape out header (available to user)
 7B85 7B86 Tape out # bytes in BASIC file
 7B87 7B88 Tape out end header
 7B91 7BA0 Tape in file name
 7BA1 7BAB Tape in user header
 7BAC 7BAD Tape in # bytes in BASIC file
 7BAE 7BAF Tape in end header
 7BB0 7BFF 80 Character Display Buffer
 7C00 - 7FFF Duplicate of 7800 - 7BFF
 8000 - BFFF Expansion ROM - 16K
 A519 Change printer pen color
 A769 Printer motor off
 A781 Send ASCII character to printer (no LF)
 ARDD Move pen
 A9F1 Send line feed (LF) to printer
 AA04 Send n line feeds to printer
 AAD9 Pen Up/Down
 ABCB Switch printer from graphic to text mode
 ABFC Switch printer from text to graphic mode
 BB06 Write tape synchronization header
 BRF5 Finalization of tape I/O control
 BCE8 Read tape synchronization header/search for filename
 BD3C Read/Write file to tape
 BDCC Send a character to tape
 BDF0 Read a character from tape
 BF11 Turn tape drive on
 BF43 Turn tape drive off
 C000 - FFFF System Program ROM - 16K
 D0D2 Magnitude Comparison for Numeric Values
 D0F9 Magnitude Comparison for Character Strings
 D2EA Search for program line number
 D461 Find address of variable
 D925 String concatenation
 D9B1 CHR\$
 D9CF STR\$
 D9D7 VAL
 D9DD ASC if YL = 60H, LEN if YL = 64H
 D9F3 RIGHT\$, LEFT\$, MID\$
 E243 Keyboard Scan - wait for character
 E33F Auto Power Off
 E42C Keyboard Scan - no wait
 E8CA Display contents of display buffer
 ED00 Output n characters to LCD using current cursor location
 ED3B Output n characters to LCD beginning at cursor = 0
 ED4D Output one char to LCD and increment cursor position by one
 ED57 Output one character to LCD
 ED95 Convert two bytes of ASCII code (0-9,A-F) into one byte of hex data
 EDEF Output one graphic column to current cursor position
 EFB6 X - Y → X
 EFBA X + Y → X
 F00B I/O Flag 2
 F01A X * Y → X
 F084 X / Y → X
 F0E9 SQR X → X
 F161 I * N X → X
 F165 LOG X → X
 F1CB EXP X → X
 F1D4 10 ^ X → X
 F391 COS X → X
 F39E TAN X → X
 F3A2 SIN X → X
 F492 ACS X → X
 F496 ATN X → X
 F49A ASN X → X
 F531 DEG X → X
 F564 DMS X → X
 F597 ABS X → X
 F59D SGN X → X
 F5BE INT X → X
 F89C Exponential-on (X ^ Y → X)
 FF00 - FFF6 Vectors for jumps and calls
 FFF8 - FFF9 Start Address for MI routine
 FFFA - FFFB Start Address for the Internal Timer
 FFFC - FFFD Start Address for the NMI routine
 FFFE - FFFF Start address for the RESET routine

