

February 25, 1981

This disk contains the newest release of CBASIC (Version 2.07). This release corrects the following problems in the previous releases:

CRUN2

- 1) Trace outputs to the console even if an LPRINTER statement is in effect.
- 2) 255 characters may be entered in response to an INPUT statement. Previously only 254 characters would be accepted.
- 3) LEFT\$ and RIGHT\$ no longer leave 5 bytes unaccessible in the Free Storage area when they operate on a null string.
- 4) SAVEMEM operates properly with Configuration 3.
- 5) The Random number generator operates properly when using Configuration 3 with CP/M Version 2.

CBAS2

- 1) ON GOSUB Statements in programs with more than 4000H bytes now generate proper intermediate code.
- 2) Constants in a %CHAIN directive may be in Hexadecimal format. This allows chaining with code areas greater than 32767 bytes.
- 3) A backslash (\) within a DATA statement is treated as a literal character, not as a continuation character.
- 4) The \$F compiler toggle accepts an optional length specifier. This controls the number of lines per page of listing.  
Example: CBAS2 X \$F(57)

XREF

- 1) The \$F toggle operates properly with the length option.

A new function, VARPTR, has been added to CBASIC to allow interfacing custom assembly language packages with CBASIC programs. This function will not be needed by most application programmers. Extreme care must be exercised when accessing or modifying information internal to the CRUN2 module. The function definition is:

VARPTR (<variable>)

VARPTR returns the address of the permanent storage location assigned to the <variable> by the run-time monitor. In the case of an unsubscripted numeric quantity, this is the actual location of the variable in question. For string variables, the value returned is the address of a 16 bit pointer to the referenced string. Because strings are dynamically allocated, the actual location of a string may vary but the value returned by VARPTR will not change after chaining.

If the <variable> is subscripted, the value returned by VARPTR is the address of a pointer to the array dope vector in the Free Storage area. The array follows the dope vector. The first byte of the dope vector is the number of dimensions. Following this single byte are n-1 (n is the number of dimensions) 16 bit quantity in the dope vector is the number of entries in the array. The array follows in row-major order.

For users who require the older version of CBASIC for use with existing applications, the previous release of CRUN, Version 2.04P, is included on this disk as CRUN204P.COM. This version should be used with all Structured Systems Group applications software.

CRUN237.COM is a special version of CRUN2 which will only work with CP/M2 version 2.xx, and takes advantage of the enhanced random access facilities of CP/M2. This is the version which should be used with the SHARP MZ80K.