

# CME-PC

## Interface Program for the Axiom CME11E9-EVBU

### Features of the software:

- Allow downloading of 68HC11 code files (\*.s19)
- Allow monitoring of variables and registers without the need to interrupt program execution
- Allow the modification of memory locations
- Provide an easy to understand interface for the user

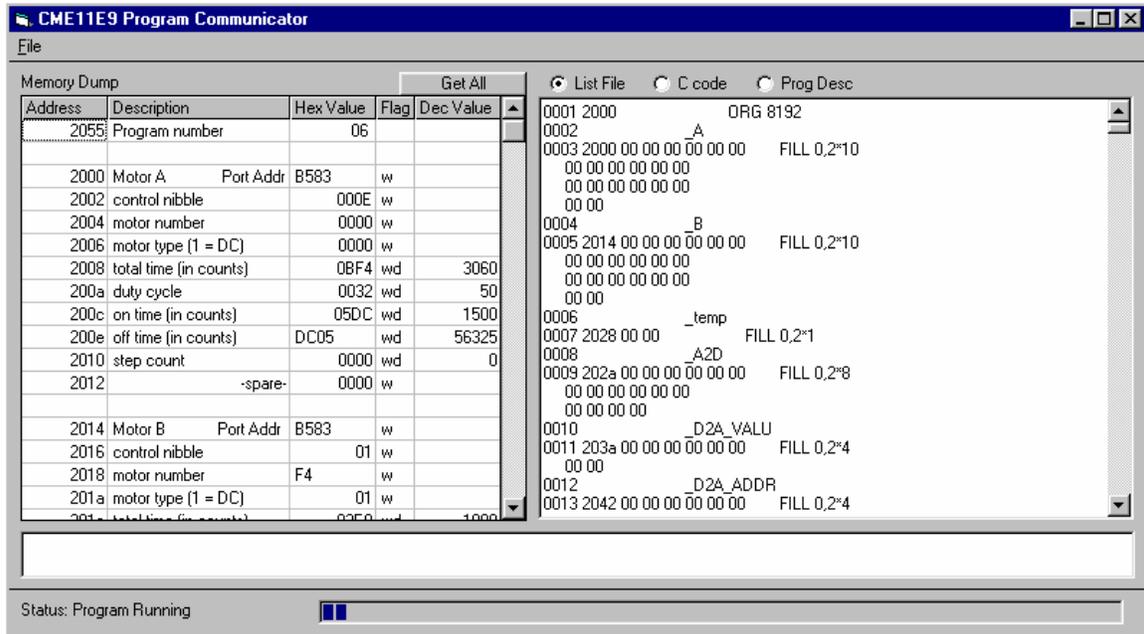


Figure 1. Sample Screen

### Operating instructions:

#### Installing the Interface code into your 68HC11 code:

To use all the functions of this program, the Debug() routine in the DEBUG.H Small-C library must be called from within the main loop of your 68HC11 code.

#### Loading code:

To upload code to the Axiom board, go to the File menu and press open. Using standard windows interface for opening files, select the program to download. The program will remind you to reset the Axiom board. Once OK is clicked, the program will be downloaded (the status bar at the bottom of the window will show the progress of the download). Once completed the program will be executed automatically and the list file will be shown in the textbox on the right hand side of the window as shown above.

#### Using the Interface:

With the \*.s19 file now running on the Axiom board, you can now enter memory addresses in the first column of the spreadsheet on the left hand side of the screen (all addresses must be in hex and contain four digits). Once entered, double clicking on the number will cause the CME-PC program to fetch and display the contents of the memory location. You can enter a description in the second column for future reference.

If you wish to fetch a word instead of a byte, a 'w' can be entered in the FLAG column, indicating to the program to fetch two bytes starting at the address in first column.

If you would like to see the value also converted to decimal, place a 'd' in the FLAG column. The decimal value will be placed in the last column the next time the memory location(s) are fetched with a double click on the address.

If you double click on a cell in the 3<sup>rd</sup> column (marked Hex Value), a window will appear that says "New Value". Enter the new value in hex in the space provided and click ok. Note that you must enter the appropriate number of hex digits (2 hex digits for a byte or 4 hex digits for a word). This will send the new value and automatically fetch the memory locations placing the new value into the spreadsheet.

**Other Features:**

To allow the user to determine locations of important addresses, the List file automatically appears in the Rich Text Box on the right hand side of the window. The user can switch to the Small C code by clicking the appropriate option button above the box.

The user can also create a simple guide to be shown by creating a file with a \*.dsc extension. This is just a simple text file that describes the program, or other features and should be named with the same file name as the \*.s19 file and is displayed when the "Prog Desc" option button is clicked.

The information in the spreadsheet can be saved at any time via the File Save command. Note that if the name used is the same filename as the \*.s19 file, it will be loaded automatically at the end of sending that \*.s19 file to the Axiom board.

You can also load any previously saved information into the spreadsheet at any time with the File Open Overlay command.

The "Get All" button will get all the memory locations defined in the spread sheet and will place the contents of the locations into the "Hex Value" column (and display the decimal if a 'd' is in the flag column).

The bottom window shows most recent communications from the Axiom board.