ALP User Instructions

For use on computers running Windows7, Windows8, or other 64-bit Windows OS with problems running AxIDE

Requirements:

EVBU Boards only: Get an Atmel AT28C64B-15PU EEPROM
- Mouser P/N: 556-AT28C64B15PU
- Digi-Key P/N: AT28C64B-15PU-ND
- Newark P/N: 68T4374

Read/Follow the instructions in 'Win7 Win8 as11 Assembly Guide' available on www.axman.com

Download Tera Term(a terminal emulation software) from: http://en.sourceforge.jp/projects/ttssh2/downloads/51174/teraterm-4.69.exe/

A USB-Serial Cable COM Port for connection to the target board – EVBU or CMD11

Load U6Load:

1) Load the Program U6 executable code onto the EVBU

a) Type “load t” at the Buffalo prompt and press the enter key. Buffalo will now be waiting for the S record file.

b) Using Tera Term, select File → Send File → U6Load.s19 and hit OK

c) After loading U6LOAD.S19 and getting the “done” message and Buffalo prompt, go to the next step.

2) Load U6 with ALP.s19

a) Enter the command “call 2000” at the Buffalo prompt and press the enter key. The LOAD U6 application will prompt on the terminal: “Program U6 Eeprom Utility”.

b) Using Tera Term, select Setup → Serial Port... and change the transmit delay per line to 30ms and hit OK

c) Using Tera Term, select File → Send File → ALP.s19 and select OK. ALP.s19 will be loaded onto U6 at this point.

d) When the Load utility software is finished, it will indicate “done” with no errors or indicate an error and provide the error address in the register “Y” view.

e) Open or Idle the JP6 Option now to protect the contents of U6

Booting to/Using ALP in Test Mode

To boot ALP, install jumper on both pins of MODB and reset the board.

Booting in ALP will display a menu with 3 options:

1) Configure
2) Program U7
3) Program HC11E9 Internal EEPROM

1) Configure

The Configure option will take you to a menu where you can turn HC11 Internal ROM ON or OFF, however the board must be reset afterward for the change to take effect.

2) Program U7

The Program U7 Option is used to load an .s19 file into EEPROM installed at U7(See Atmel AT28C64B-15PU part numbers under Use U6LOAD).

NOTE: In order to program U7, ROM MUST BE DISABLED, the WRITE_EN jumper MUST BE ENABLED and the file must contain only addresses between $E000 and $FFFF.

After selecting the Program U7 option, the user will be prompted to send the file to be loaded into U7. Select File → Send File → yourcode.s19. Once the file is done loading, the user will be prompted to remove the WRITE_EN jumper and then hit any key to return to the main menu. Once the user has loaded a file into U7, it can be booted to(as long as the file set a reset vector at $FFFE-$FFFF) by resetting the board in expanded mode(MODA and MODB jumpers disabled) with internal ROM disabled.

3) Program HC11E9 Internal EEPROM

The Program HC11E1/E9 Internal EEPROM Option has the same functionality as the Program U7 Option, except that the user does not need to enable/disable any jumpers, and the file to be loaded must be between addresses $B600 - $B7FF.