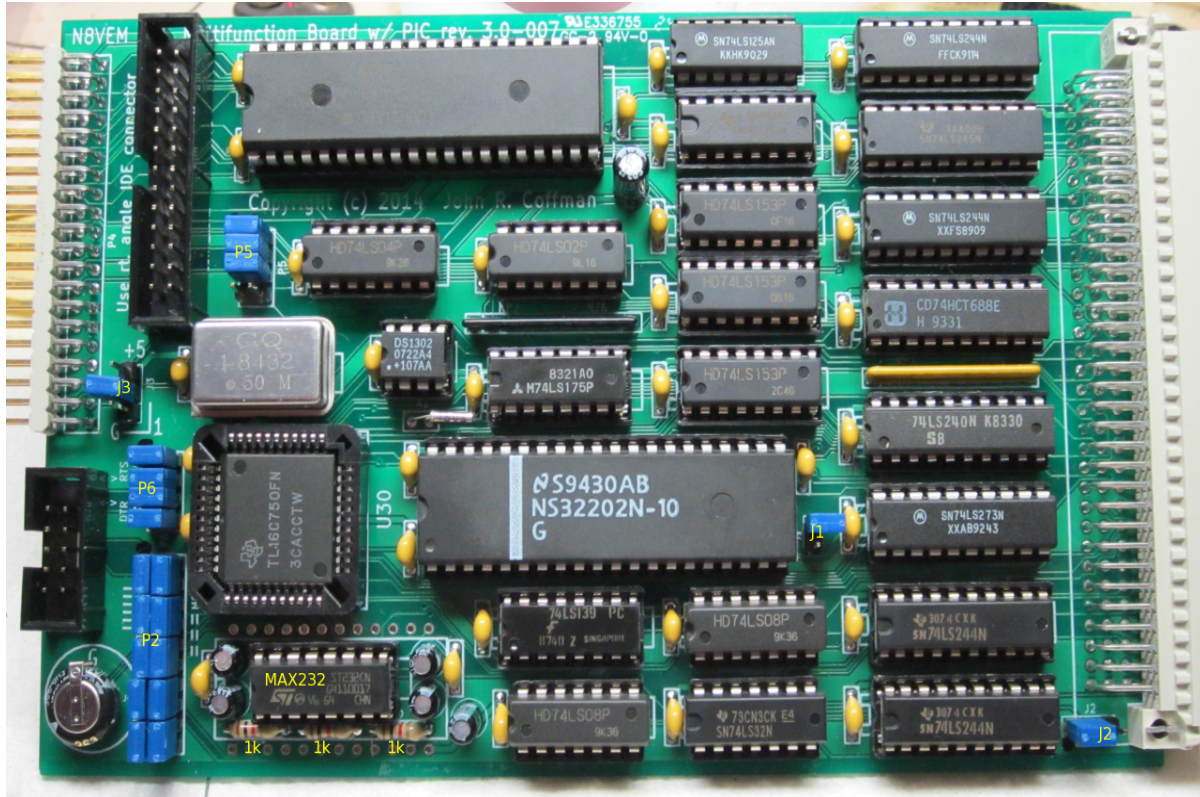


The MF/PIC 3.0 Board updated to 4.0 in 2017

Completed board:



New since the earlier board are P6 and J2. Added in rev. 4.0 is R4 (see note at bottom).

Jumpers:

P2 – null modem jumpers

vertical (as shown) for board to look like a MODEM

horizontal (like P6) for board to look like a TERMINAL (most N8VEM boards)

P5 – I/O device code setting. Shown is \$10 (on-on-on-off), which is a new setting for the UNA BIOS. Older setting is \$40 (on-off-on-on) for the Mini-68K CPU board.

P6 – default is horizontal; vertical is used for some old terminals to reverse the function of RTS/CTS with DTR/DSR to allow auto-flow control with old terminals that use only the latter protocol. Use vertical position with caution.

J1 – connects to B-row B_/INTA signal. As long as B_/M1 is supplied, leave this open.

J2 – Shown for N8 legacy RESET function (1-2). To switch to Kontron compatible RESET, jumper (2-3), but all your boards must use the same setting. Old boards do not have this jumper selection. Kontron RESET is the preferred setting as of 2015.

J3 – Power (+5v) or Ground setting for P3-pin 25 and P4-pin 20. If a CF card adapter is to be powered from the board, use the +5 setting. Ground was the default for P3-pin 25 on the SBC v1. SBC v2 has a similar jumper. If unsure, leave this jumper open as shown until you need either Power or Ground on one of the P3 or P4 connectors.

MAX232 stuffing is shown in this photo, rather than the full MAX235 (24-pin option). Note that the pull-up/pull-down resistors (R1, R2, R3) are 1K, rather than 4700, making 3 of the RS-232 signals stronger than with the higher value resistors. 470-1000 are good values here.

Super Cap is a less expensive 0.33 Farad, 5.5v, part on special from Jameco. 0.22F is called for, but 0.1F & up are fine. Consult earlier documents for the MF/PIC 1.0 board if you want to stuff this position for a B_VBAT option, or an external battery connector option.

30-Aug-2014 – jrc

The board pictured above is the 3.0-007 board. The 3.1 board differs only in updated, and more useful labelling (I hope). All components are the same and in exactly the same positions. Major change to the labelling is the resistors R1-3 are now labeled on the silkscreen as “1000.”

N.B. The “-007” is a reference to the schematic revision level. The “3” is the major board revision; and the “.0” or “.1” is the production run.

22-Jun-2015 -- jrc

RE: board 4.0-008

The 4.0 board is identical to the 3.0/3.1 boards in the position and placement of components. There is a single component addition, R4=10k just below and slightly left of pin 1 of the NS32202. This is part of the circuit update to add the IDE interrupt to IR9 on the ‘202 PIC to support Linux on the KISS-68030 CPU board. Also, a circuit error is fixed to pull the HIGH signal to VCC (RP2.8 connection).

29-Oct-2017 – jrc