

Brainstorm DCD-8

Modification of Main PCB for use with the CX-4 Wordclock Expander Option

NOTE: *This modification only needs to be performed on DCD-8 manufactured before February 2009 whose serial number is lower than 1284.*

For correct operation of the CX-4 Wordclock Expander option card, a small modification must be made to the main DCD-8 Printed Circuit Board. The modification will not affect any other functions of the DCD-8.

This modification requires expert soldering skills. Please read the instructions in their entirety, and DO NOT proceed unless you are fully confident that you can execute every step successfully.

1. Power down the DCD-8 and remove the top cover. It will not be necessary to remove the PCB from the box.
2. Locate the components shown in Fig.1. They will be found to the rear of the box, immediately forward of the BNC connectors for Wordclock Outputs 3 thru 8.

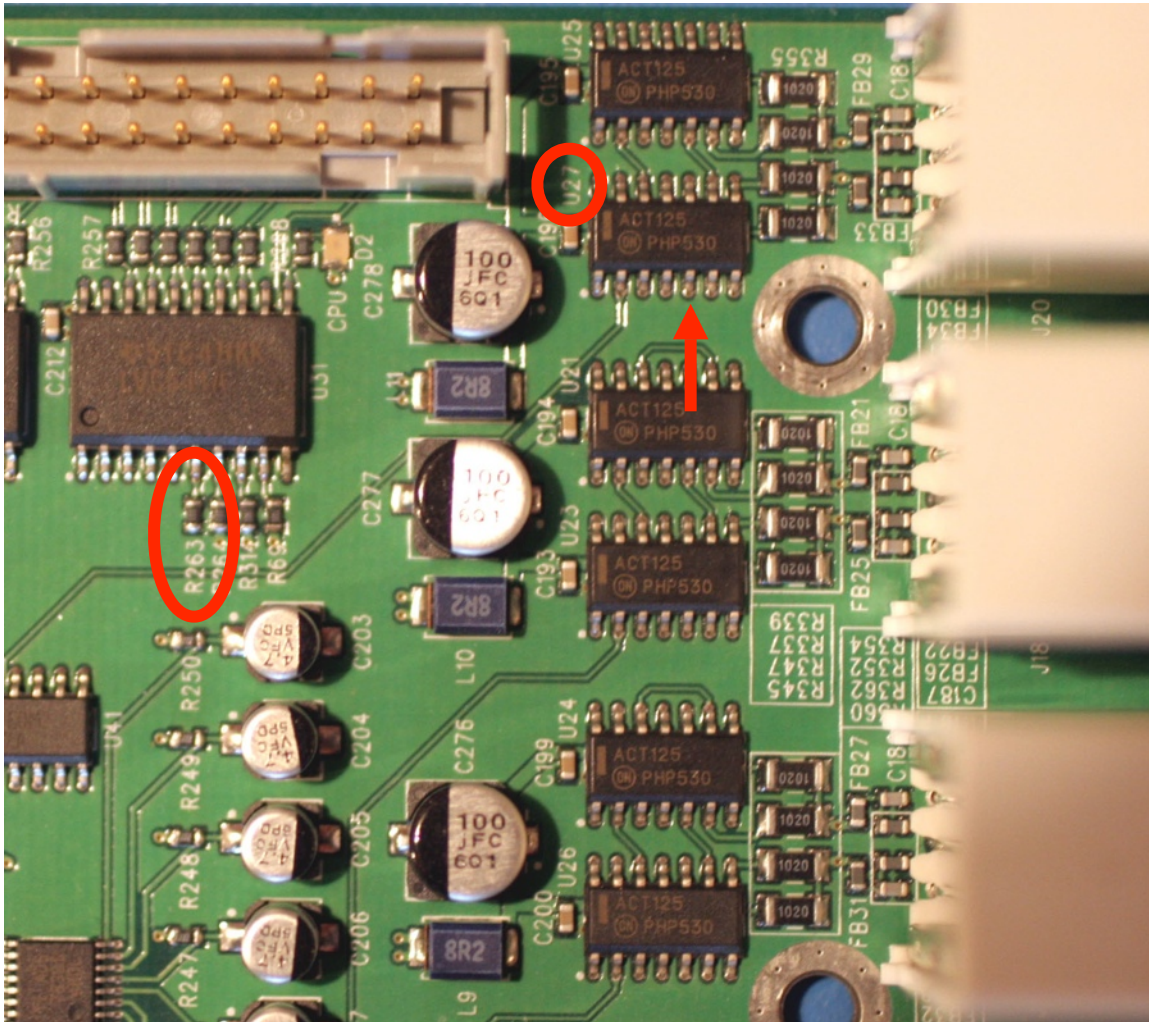


Fig 1. Location of Components

3. Also using Fig. 1, locate R263 (circled) and pin 5 (arrow) of U27 (label circled). In the following steps we shall be removing R263 and then running a jumper wire from U27 pin 5 to one of the exposed pads of R263.

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4. Carefully remove resistor R263, as shown in Fig. 2 . .

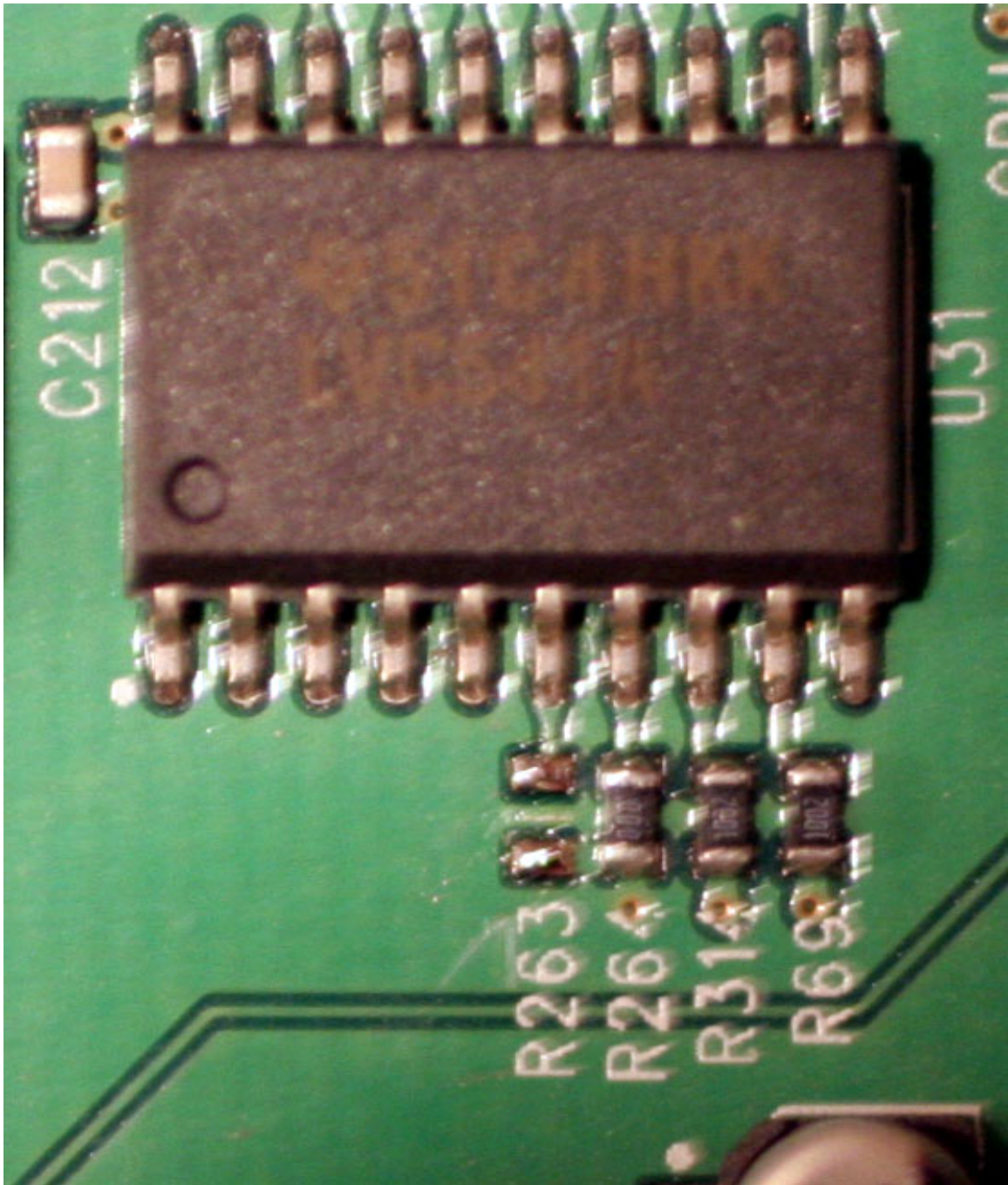


Fig 2. Removal of R263

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5. As illustrated in Fig. 3, connect one end of a jumper wire (solid AWG 28 recommended) to pin 5 of U27. This procedure requires fine soldering skills, and should only be attempted by an experienced technician.
6. Also as shown in Fig. 3, connect the other end of the jumper wire to the exposed pad of R263 which is closest to U31.

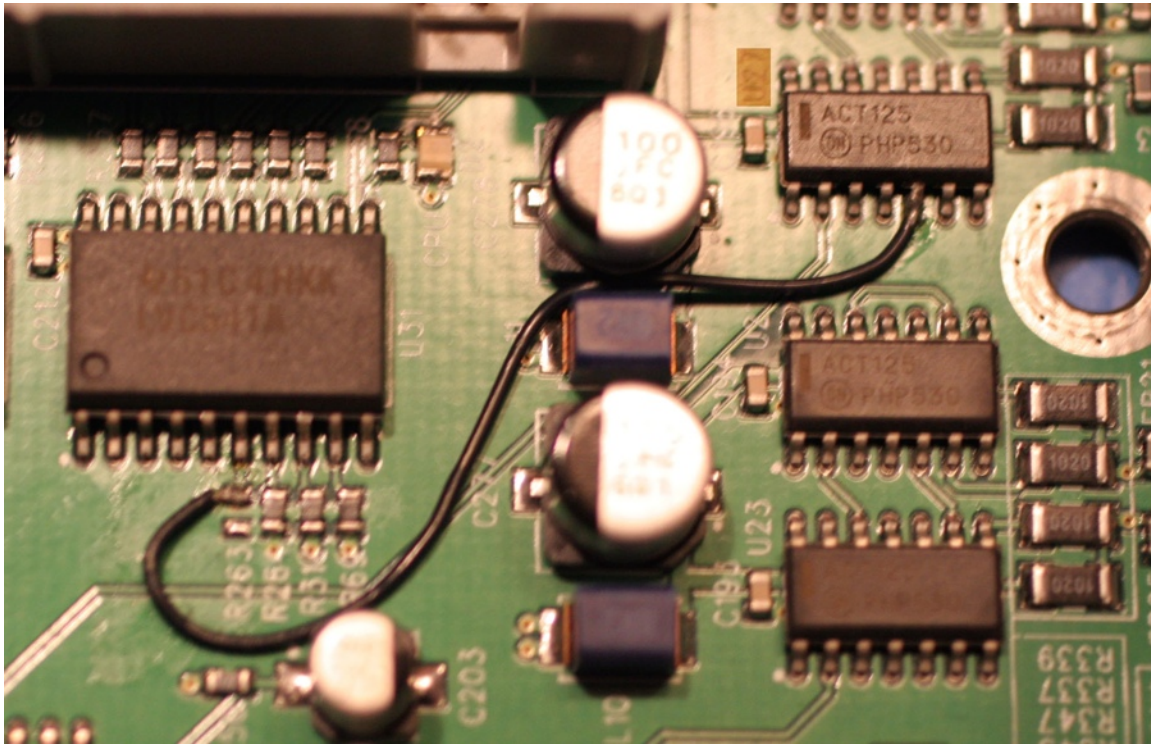


Fig 3. Jumper Completed

7. The modification is now complete.
8. The connection may be tested by powering up the DCD-8 and observing the signal at U31 pin 6 on an oscilloscope. A square wave should be seen, approximately 3.2V p-p, with frequency as currently selected for Wordclock Outputs 7&8.
9. Replace the lid on the DCD-8.