

# Philips NMS 1205 Music Module Expander

## 256 kB Sample RAM, MSX-Audio Basic, original software

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### **Warning:**

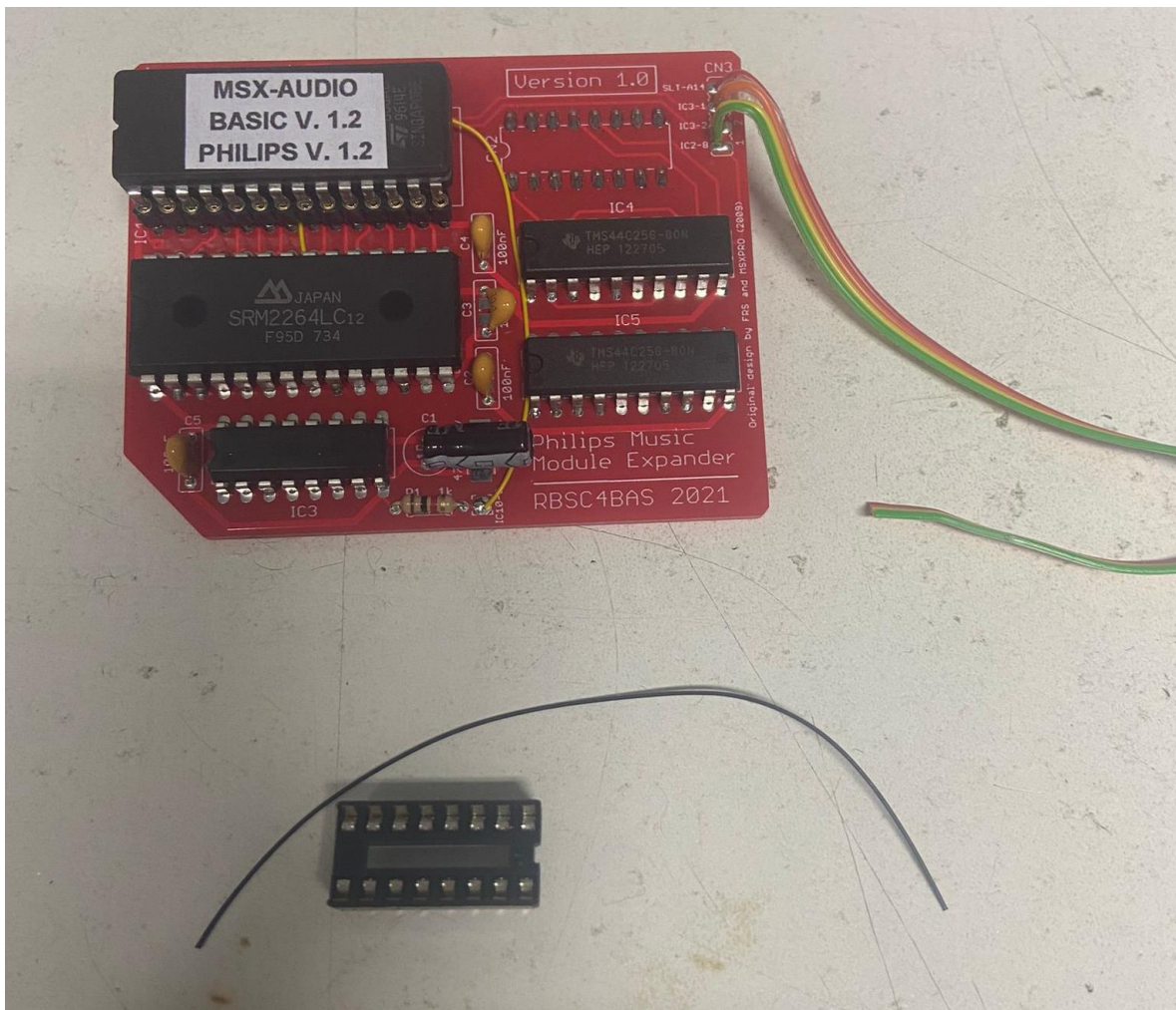
The most important part in the Music Module is the printed circuit board (PCB). Parts can be replaced, but not the PCB. Do not try to unsolder the parts, but cut them loose and then remove the solder pins. The use of IC sockets is recommended.

### **Background:**

Back in 2005 Brazilian MSX users Fábio Ricardo Schmidlin (FRS) and Luciano Sturaro (MSXPró) released an expander PCB for the Philips Music Module. This board came with an adjusted Panasonic MSX Audio ROM and with 256KB sample memory. A while ago FRS published his schematics so other MSX users could recreate his upgrade PCB.

### **Upgrade package contents:**

- Completely pre-assembled expansion board
- 16-pin IC socket
- Black wire



The contents of the upgrade package.

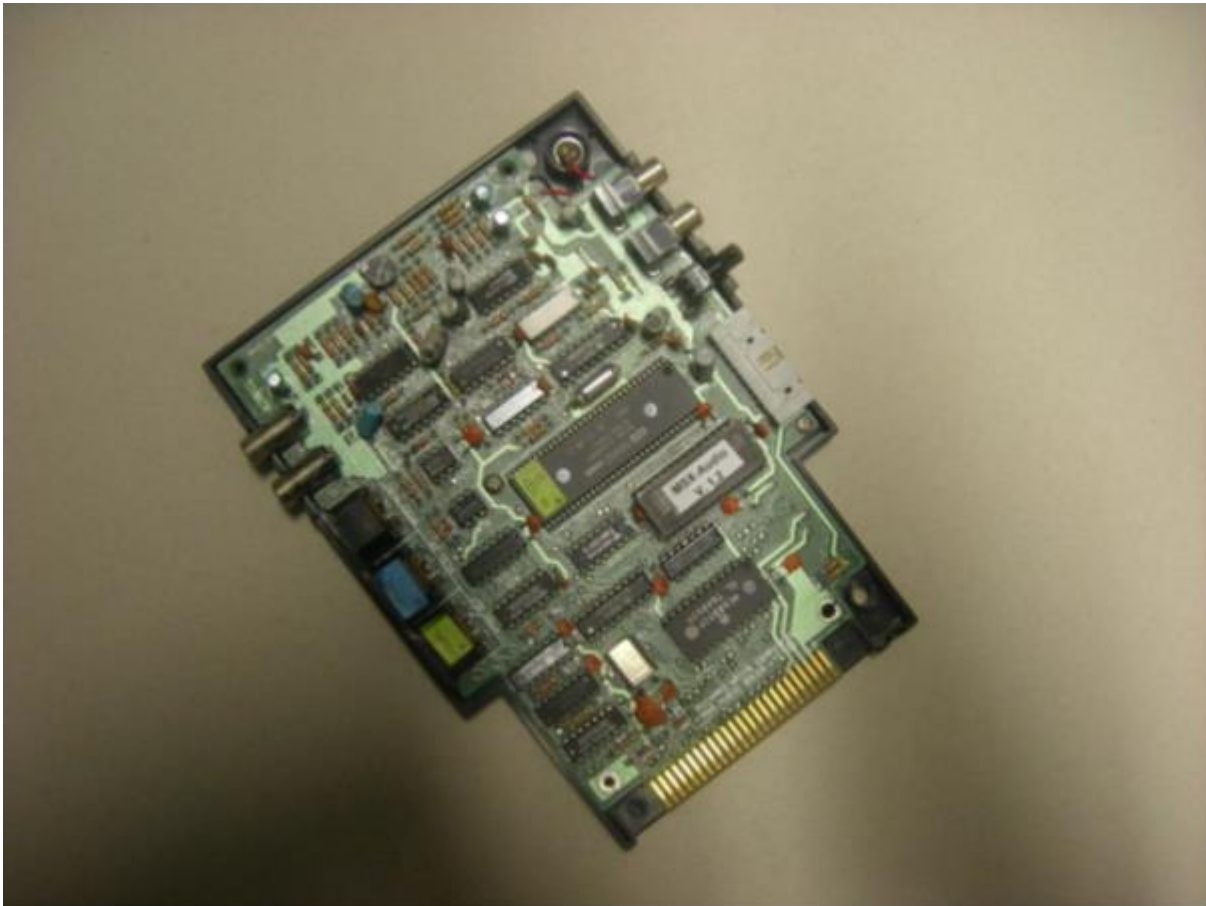
## Installation instructions:

- Open the Music Module (4 screws).
- Desolder the wires of the microphone.
- Remove the PCB from the front of the housing (2 screws).
- Remove IC1 (EPROM on IC socket). This EPROM is labeled as MSX-Audio V1.2, has another text written on it, or has no text at all.
- Remove IC8 (21256) by desoldering or cutting it loose.
- Remove the remaining solder tin from the pin holes of IC8. The use of a professional desoldering device or desoldering braid like Chem-Wik is recommended.
- Place a 16-pin IC socket in the free space of IC8.
- Connect IC10 pin 36 (Y8950) and IC2 pin 9 (74LS04) using the provided black wire.
- Solder the thin yellow wire from the expansion board to IC10 pin 9 (Y8950).
- Reassemble the PCB in the front of the housing (2 screws).
- Solder the microphone wires.
- Place the expansion board in the IC sockets of IC1 and IC8. Note that the pins of the upgrade board are too long to be inserted completely into the sockets.
- Solder the red wire to pin 25 of the slot connector.
- Solder the orange wire to IC3 pin1 (74LS00).
- Solder the yellow wire to IC3 pin 2 (74LS00).
- Solder the green wire to IC2 pin 8 (74LS04).
- Close the case by putting the back cover into place (4 screws).

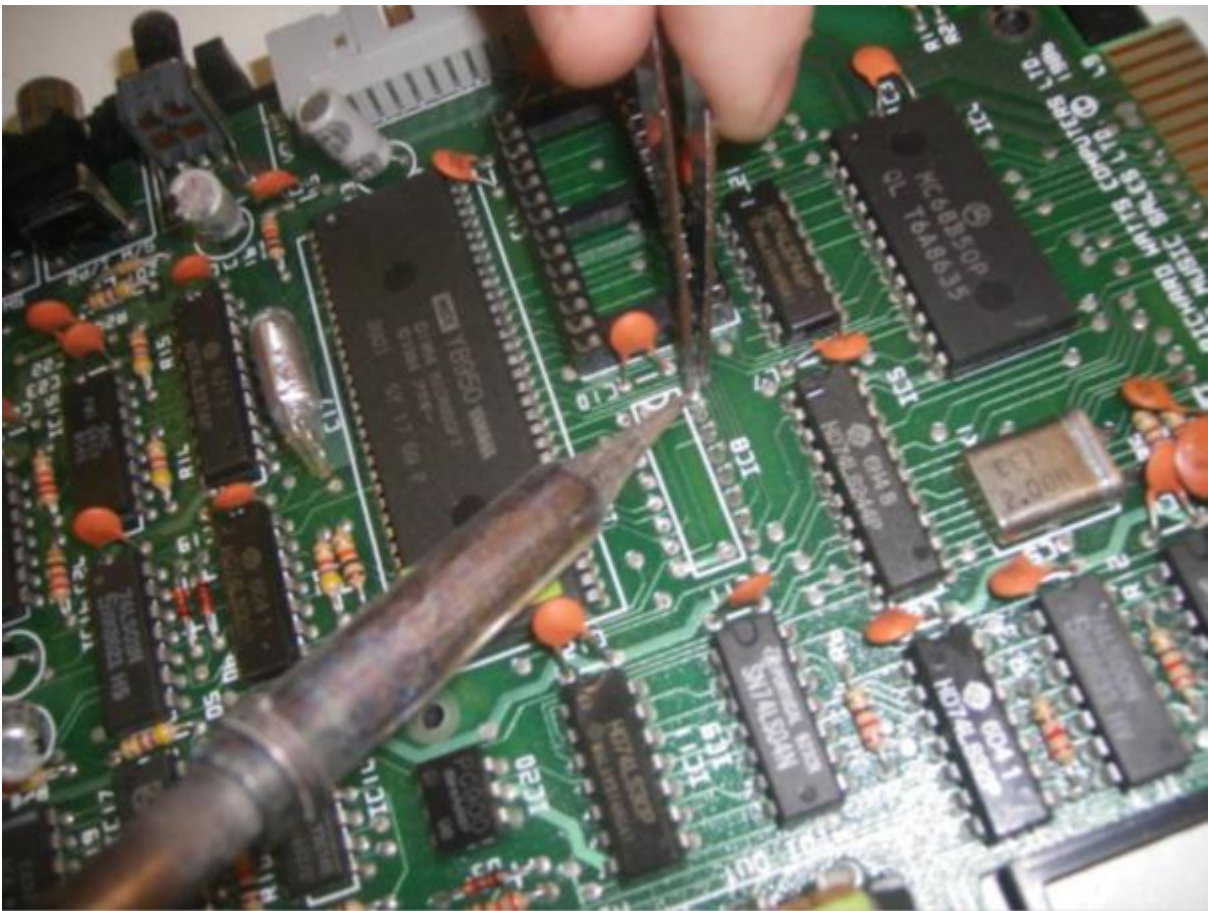
→ **Important keys (hold during boot):**

ESC = Start original software

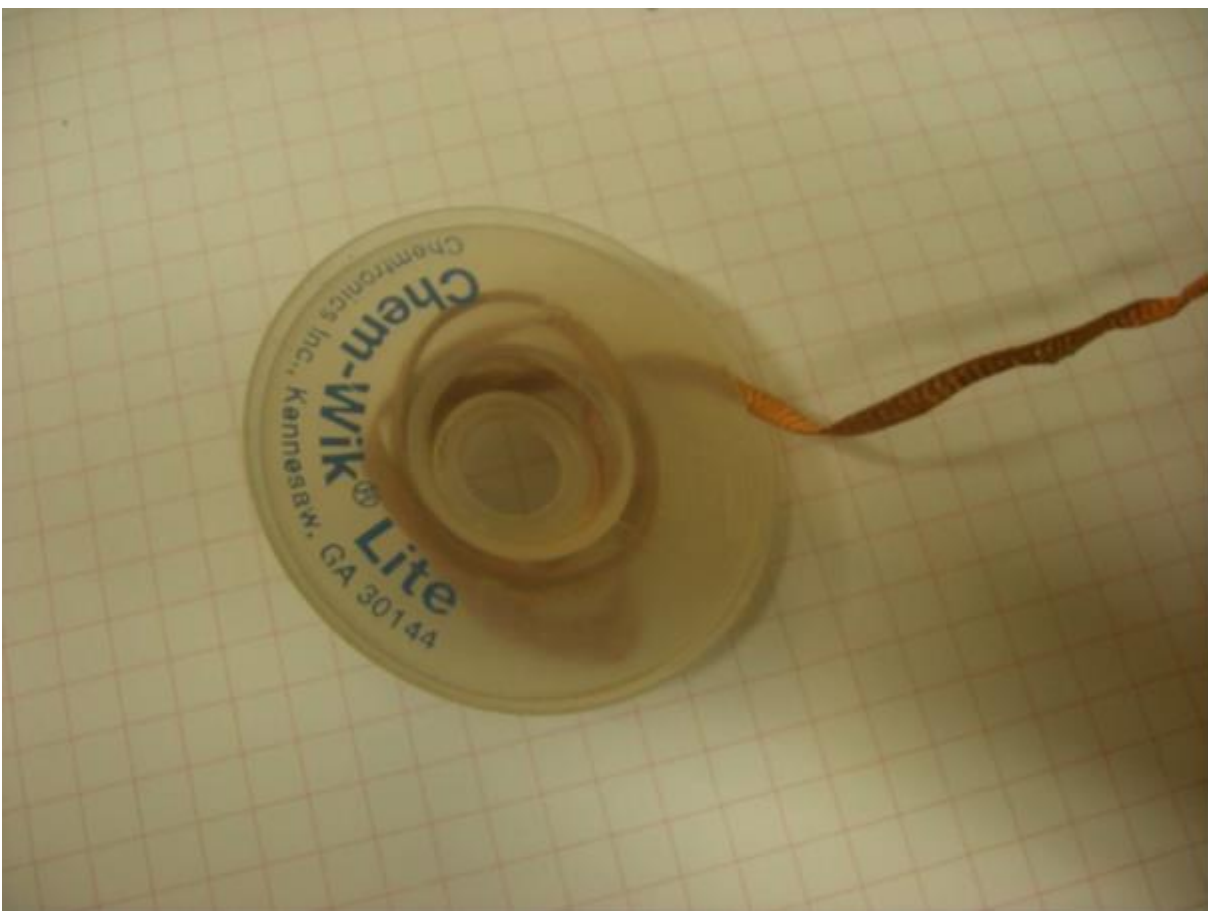
TAB = Disable MSX-Audio Basic



Philips NMS 1205 Music Module without its back cover.



Removing IC8 by cutting and then unsoldering its pins.



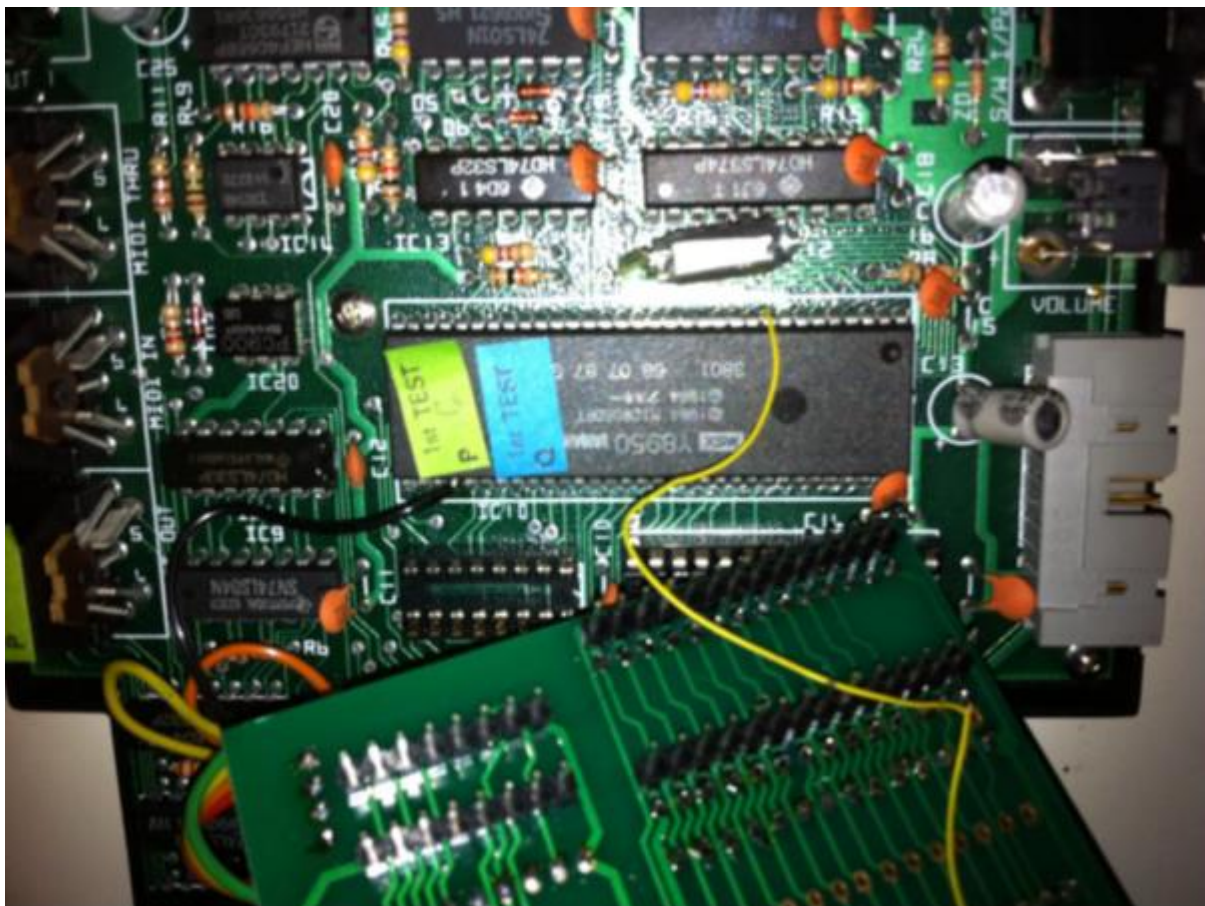
Chem-Wik desoldering braid.



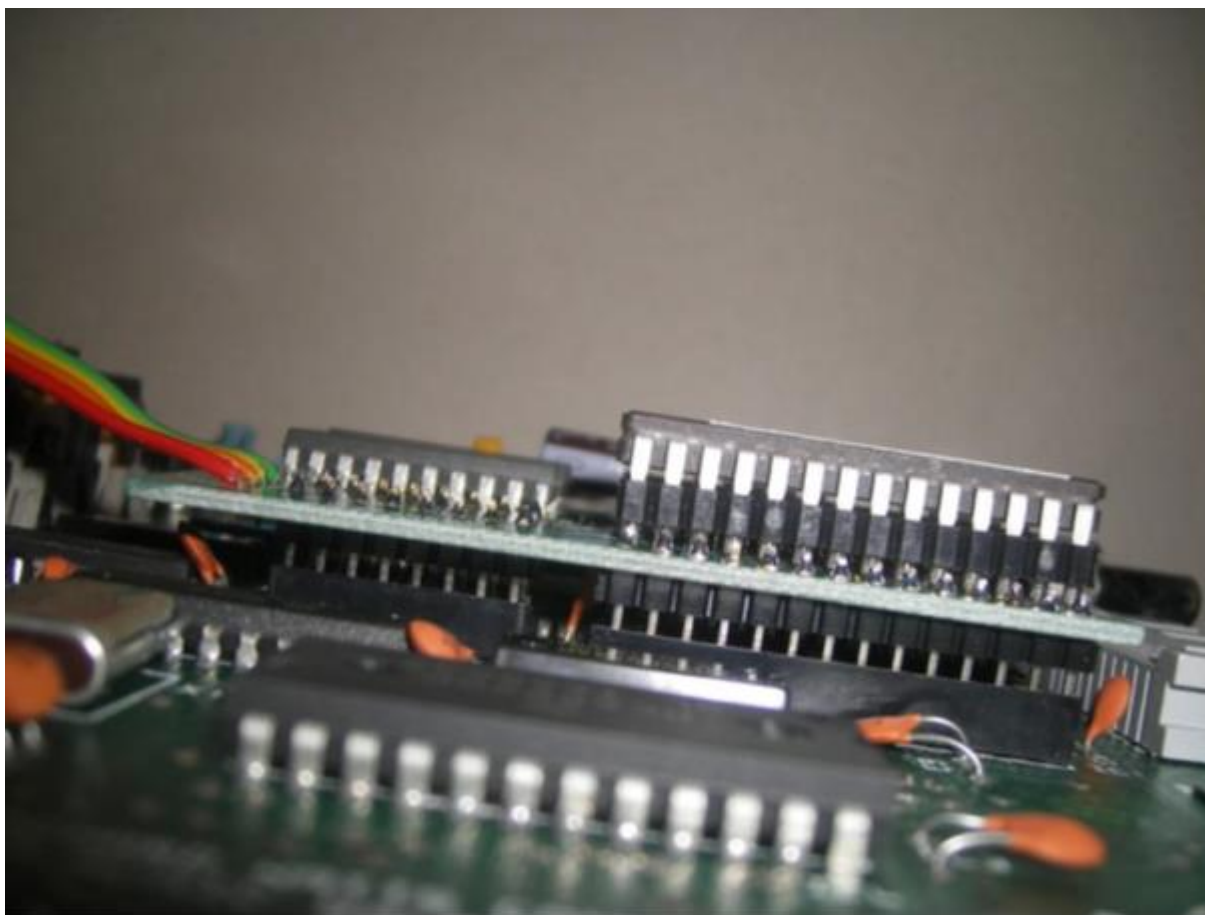
IC1 has been removed and IC8 has been replaced by an IC socket.



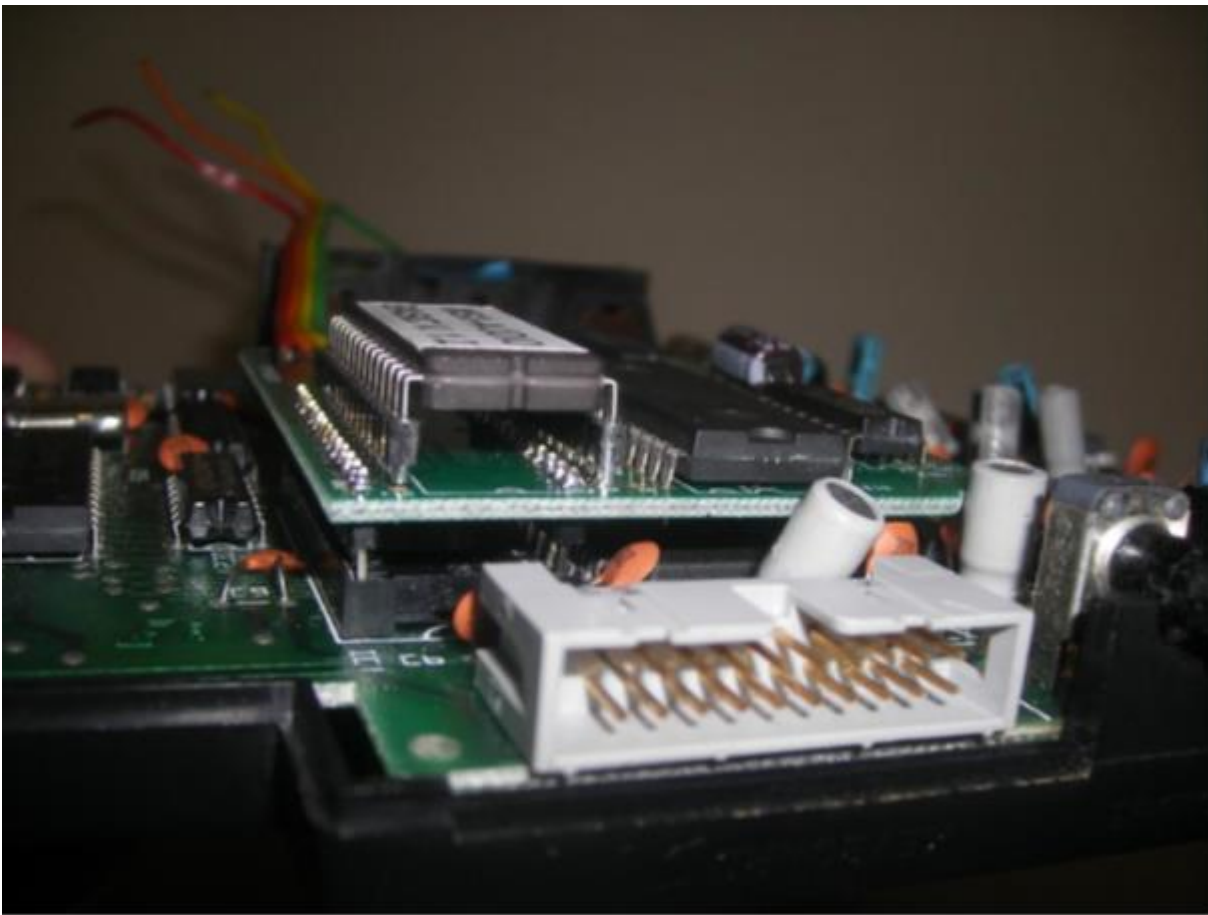
The black wire connecting pin 35 of IC10 to pin 9 of IC2.



The thin yellow wire connected to pin 9 of IC10.



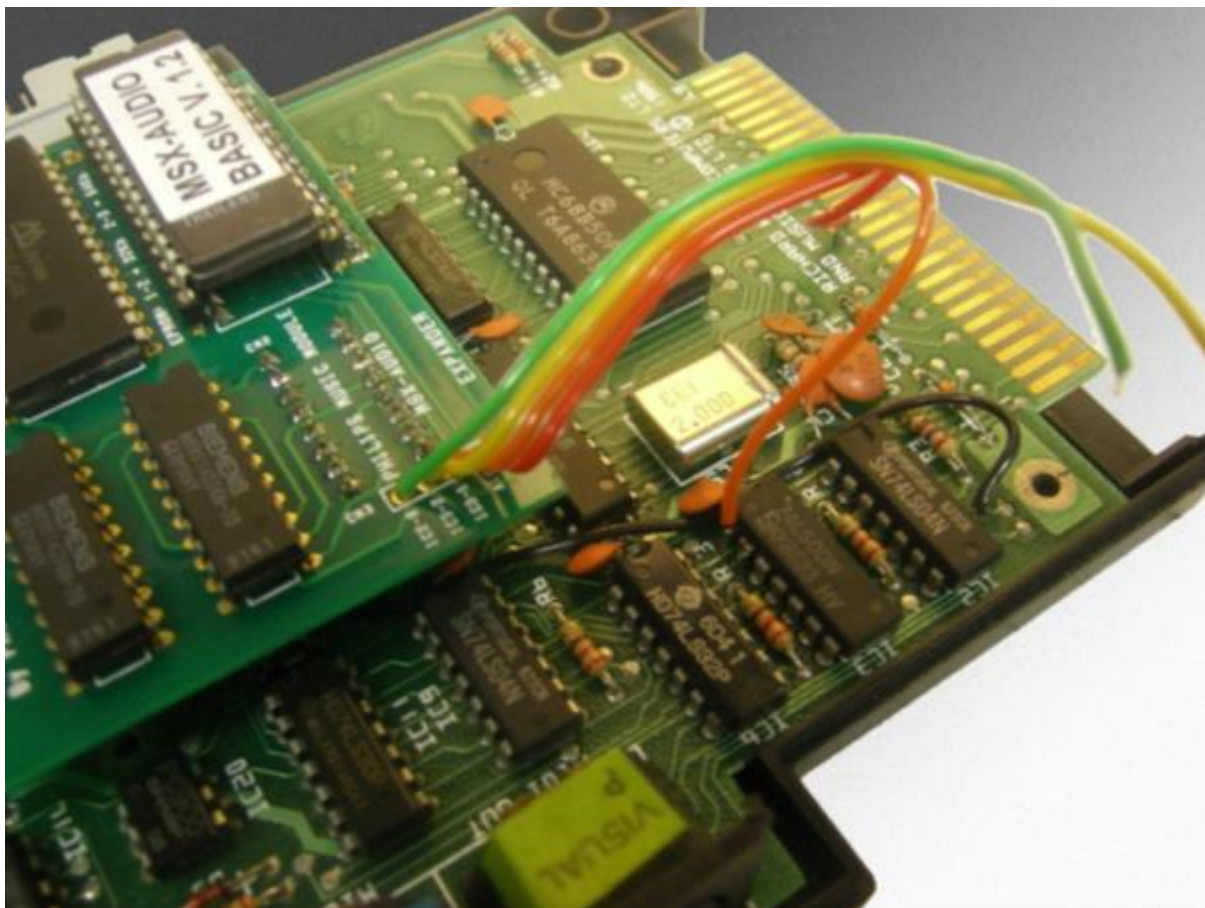
Side view of the installed upgrade board.



Bottom view of the installed upgrade board.



The red wire connected to pin 25 of the slot connector.

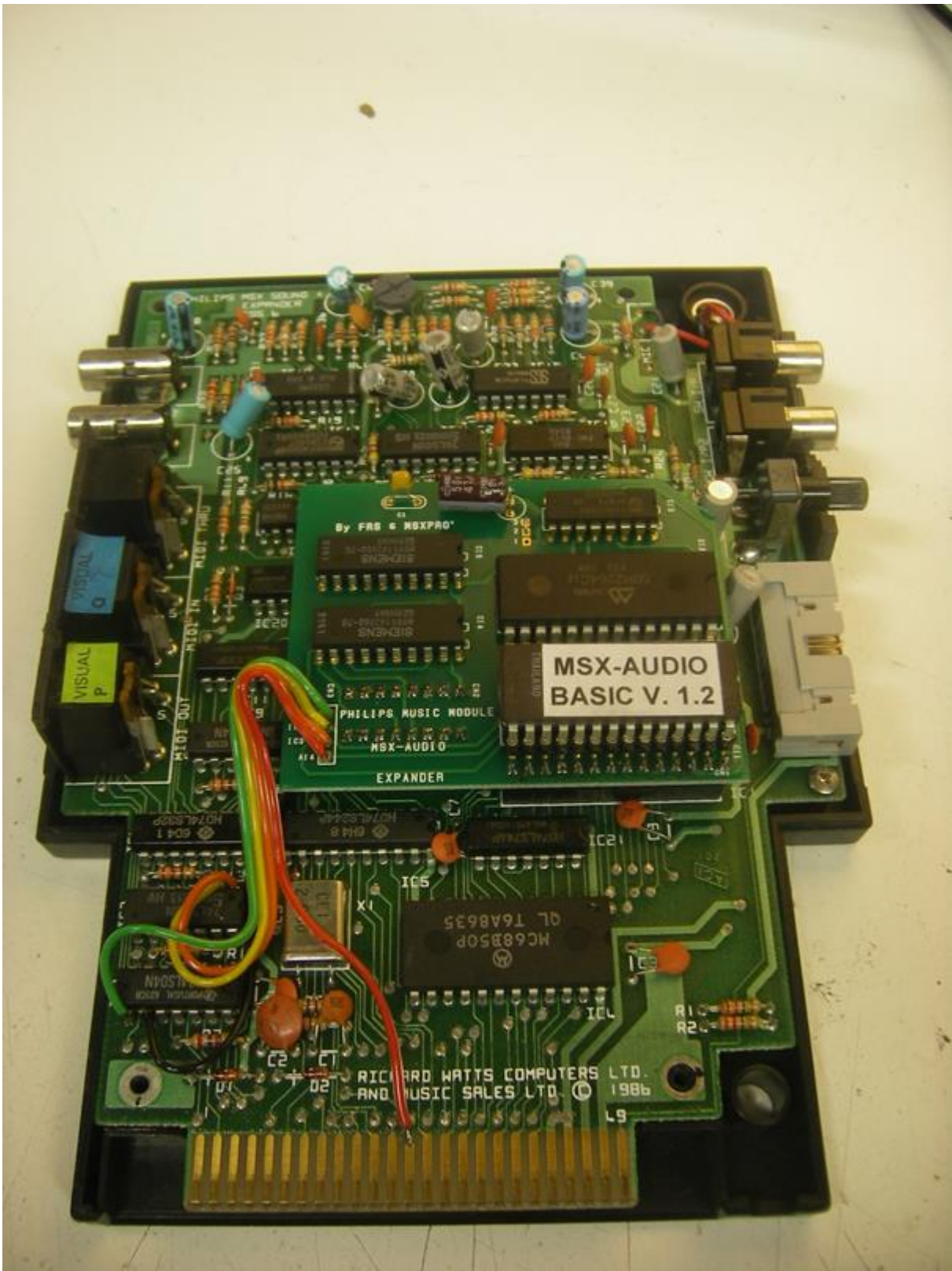


The orange wire connected to pin 1 of IC3.



The yellow wire connected to pin 2 of IC3 and the green wire connected to pin 1 of IC2.





Philips NMS 1205 Music Module with installed expansion board.