

Turbo 7 MHz for the Philips NMS 8280 MSX-2 Computer

Original by: Bas Kornalijnslijper

Translated by: Bart Hamer



Warning:

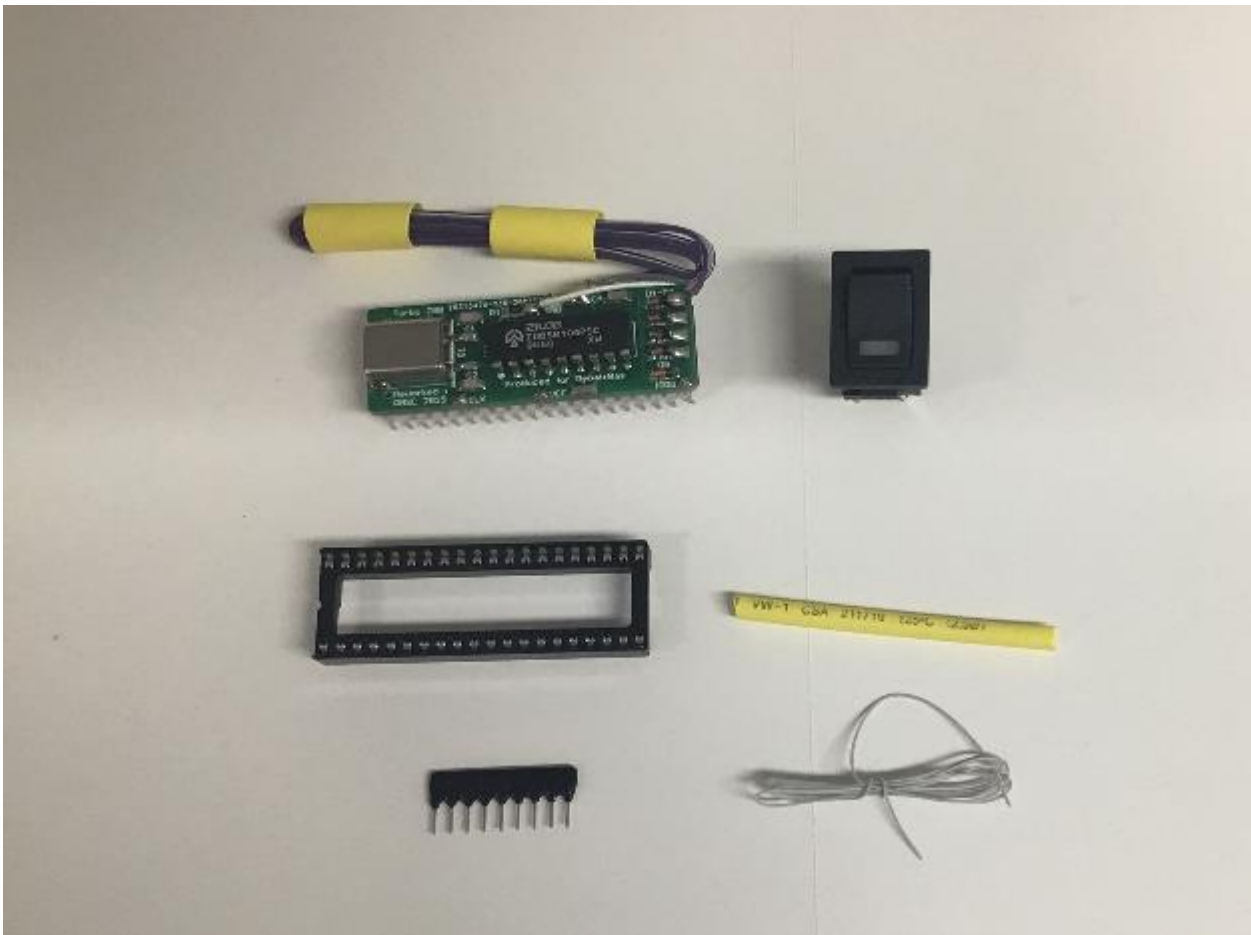
The most important part in the computer is the printed circuit board (PCB). Parts can be replaced, but not the PCB. Do not try to unsolder the parts, but cut them loose and then remove the solder pins. The use of IC sockets is recommended.

Upgrade package contents:

- Completely pre-assembled expansion board
- 40-pin IC socket
- Switch with led
- Resistor array (2K2)
- Insulating material (shrink tubing)
- Thin wire



The Philips NMS 8280 MSX-2 computer.



The contents of the upgrade package.

Installation:

- Remove the cover (7 screws).
- Remove the support beam (4 screws).
- Remove the disk drives including front panel (4 screws and various cables).
- Remove the video PCB (5 screws and various cables).
- Remove the motherboard (16 screws).
- Remove IC145 (Z80).
- Remove the RN101 resistor array (near the keyboard connector).
- Cut pin 9 from IC109 (74LS74).
- Cut pin 11 from IC148 (74LS367).
- Solder the new resistor array (2K2) in place of RN101 (note pin 1).
- Place the 40-pin IC socket in place of IC145 (Z80).
- Make a connection between the print spot of IC148 pin 11 (74LS367) and J106-1.
- Place the Turbo 7 MHz expansion board in the IC socket.
- Make a connection between IC155 (74LS32) pin 2 and one of the free diodes on the Turbo 7 MHz expansion board.
- Mount the switch with LED in the front, the top cover or another place of your choice.
- The red or white wire is the positive side of the LED.
- The brown or black wire is the negative side of the LED.
- The orange/yellow or gray/purple wire pair is for the switch.
- Insulate the solders with a piece of shrink tubing

Testing the Turbo 7 MHz:

The operation of the Turbo 7 MHz can be tested with the following BASIC test program:

```
10 FOR I=1 TO 100  
20 FOR J=1 TO 100: PRINT J;: NEXT J: NEXT I
```