**How to fix the control board for the coffee machine**

The missing chip is the 74hc4051 multiplexer. This chip burnt out due to unknown reasons and caused a short circuit on the control board.

This is the control board with two multiplexer chips the missing one is upside down.

A picture containing text, electronics, circuit

Description automatically generated

Here is a diagram on the connections on the chip:

The dot represents the same dot on the chip to indicate orientation.

**How to print a new PCB (if it cannot be fixed)**

The PCB schematic is available as a PDF and as a KiCAD project. The PDF is called “Delonghi\_Magnifica\_Control\_PCB.pdf” and the KiCAD project is in the same folder. KiCAD can be used to transform the schematic into a physical board that can be printed off in the Advanced Manufacturing Building.