

choice to operate the entire GSM board from a 3.3 V power supply voltage to prevent a difference in logic levels, but oddly enough we then run into a different problem. Although the power supply voltage of the M95 is specified to be in the range of 3.3 to 4.6 V, the module continually sends unsolicited warnings via the UART when the power supply

voltage approaches these limits within about 100 mV. This interferes with the decoding of those messages that we do want to receive from the M95, and furthermore, the M95 can then suddenly switch itself off. That is why the power supply level, using a MIC29302 (IC1), is set to 4.4 V, not a particularly common logic level. Nowhere in the documentation

does Quectel elucidate what the thinking behind this behavior is. LED2 begins to flash as soon as the M95 is switched on. The label 'netlight' that Quectel uses to name this output would suggest to us that the module is then connected to a mobile network, but that is not the case. The M95 is in a standby mode immediately after the power supply

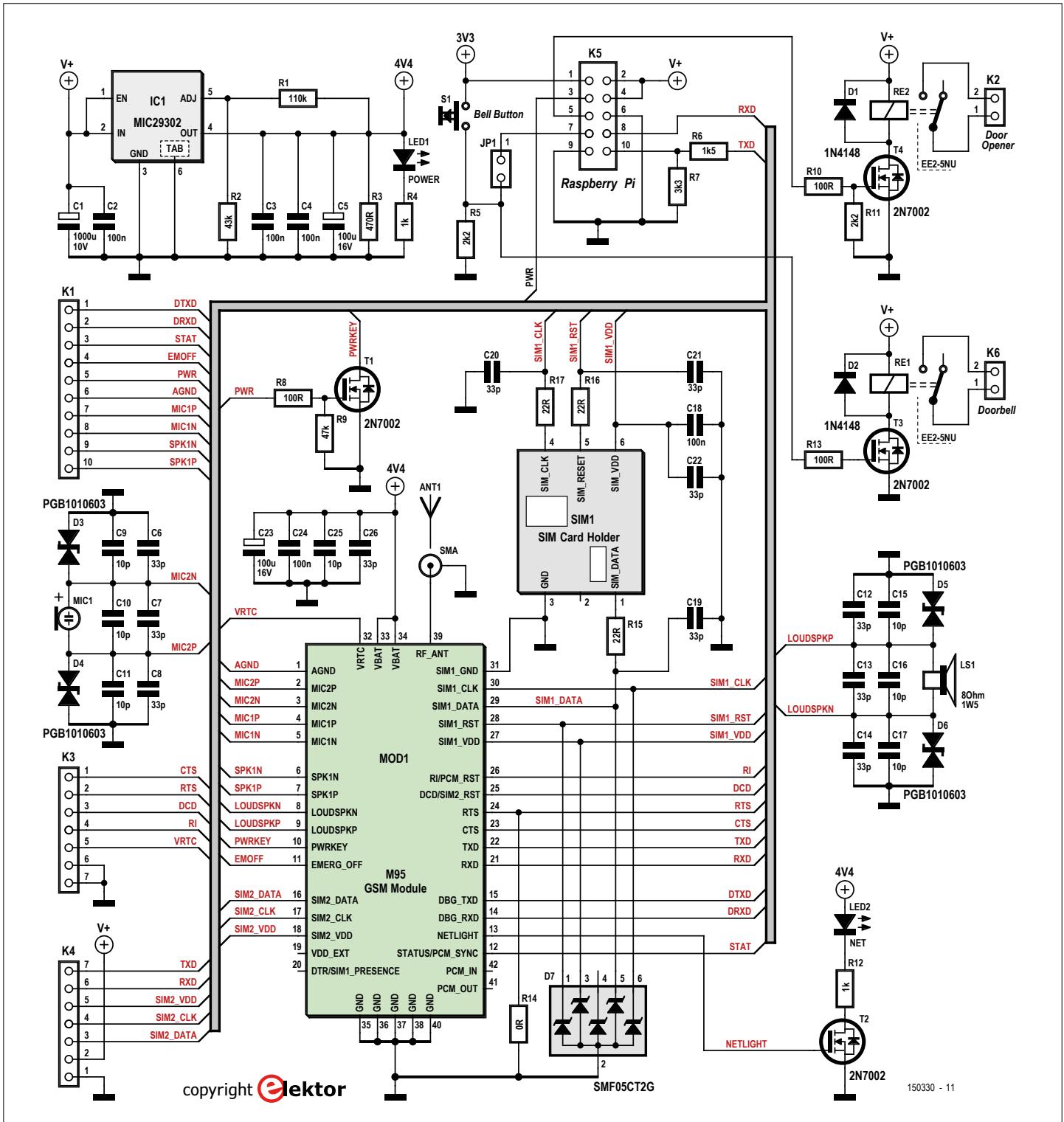


Figure 1. The major parts in this circuit are the M95 GSM module and the SIM card holder.