

Soldering Report

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The following report endeavors to describe the manner in which we continued mastering our soldering skills. Additionally, it succinctly presents the results obtained and what the measurements convey. Notably, as we aimed to perfect our newly acquired skill, we soldered two boards. Hence, this document expounds on both of them, with the second one being supported by a corresponding video recording..

In first place, the first board consisted of multiple resistances of different sizes, transistors, diodes and components resembling microcontrollers. Despite the straightforward task at hand, our recent initiation into the craft of soldering required us to ensure the integrity of the connections. Hence, employing a multimeter we measured collective resistance of each column. Figure 2 conveys the total ohms of the first column with a total of $35.5\Omega^1$.

In summary, due to the close resemblance between the measured value and the anticipated one, we concluded that the soldering of this board was executed correctly.



Figure 1: First board. Soldered.



Figure 2: Ohm measurement.

Proceeding to the second board, it presented the ultimate challenge to decide whether our soldering skills sufficed in order to move on to the next phase of the project. The accompanying figure (3) illustrates the LED functionality of the board, along with the soldered largest and smallest resistances².

¹Since that column was made of 362Ω resistors with a total of 10 rows, the result should be approximately $3.62 * 10 \simeq 36.2\Omega$.

²Please watch the adjunct video to see the board when powered on.

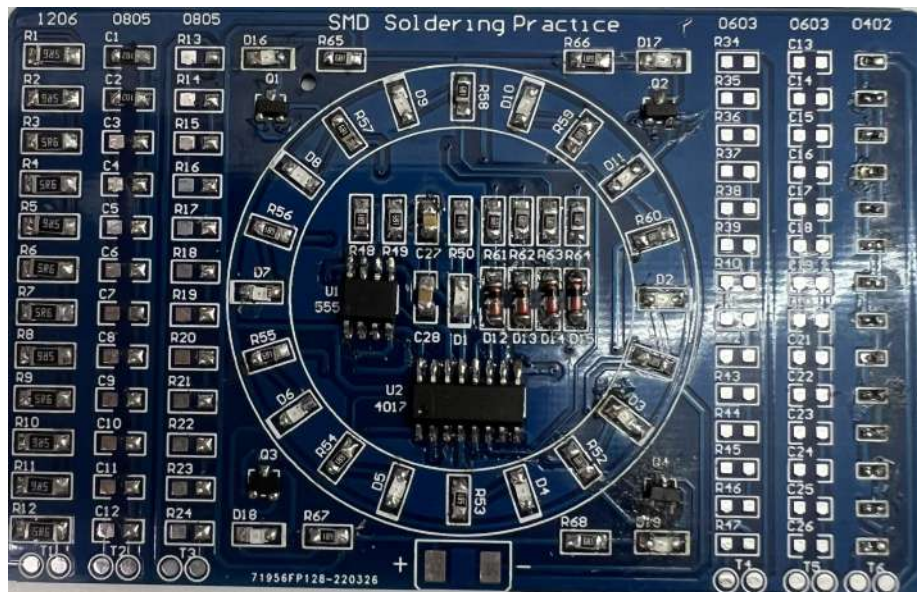


Figure 3: Second board. Partially soldered.