

**Figure 1:** View layout designed for the battery charger controller. The pins were placed in the positions shown in the diagram of the datasheet, apart from the inputs tempmin, tempmax, tmax and iend, placed here on the right side. In order to be able to visualize the pins (ME3), a zoom-in was necessary, thus the layout is shown here divided in two - a top part (shown on the left) and a bottom part (shown on the right).

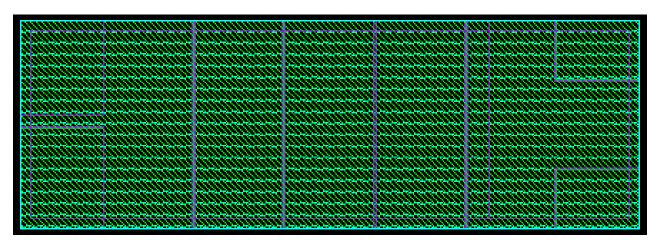
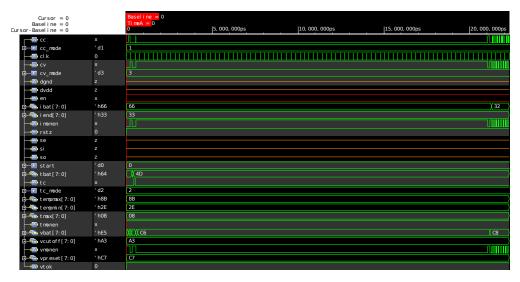
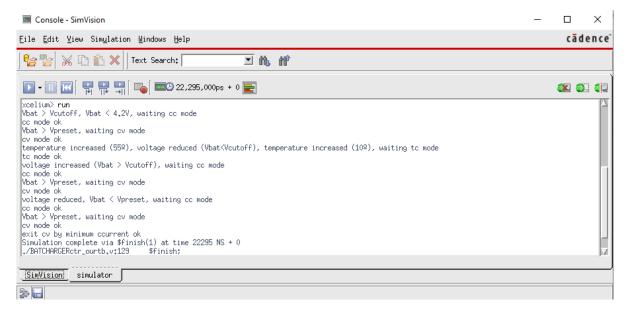


Figure 2: View abstract obtained from the layout shown in Figure 1 [this image has been rotated 90°].



**Figure 3:** Waveform window obtained by simulating the controller design described in the encrypted file with the testbench BATCHARGERctr\_ourtb.v, for a total simulation time of 22 295 000ps.



**Figure 4:** Picture of the messages in the SimVision console obtained by simulating the controller with the encrypted file.