

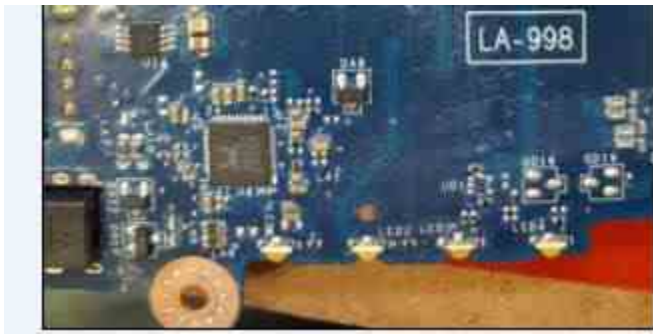
Model: DELL Inspiron 15 (3537) Alien
Notebook. Board number: Compal OEM, board
number LA-9982P, 4th generation single
CPU. Fault phenomenon: The water inlet
machine does not start when pressing the
switch.

Maintenance process: The customer sent for repair, and the machine was a notebook computer. After
the machine is taken by itself, it is true that the machine will not be turned on first. Attached
with physical drawing and board number:



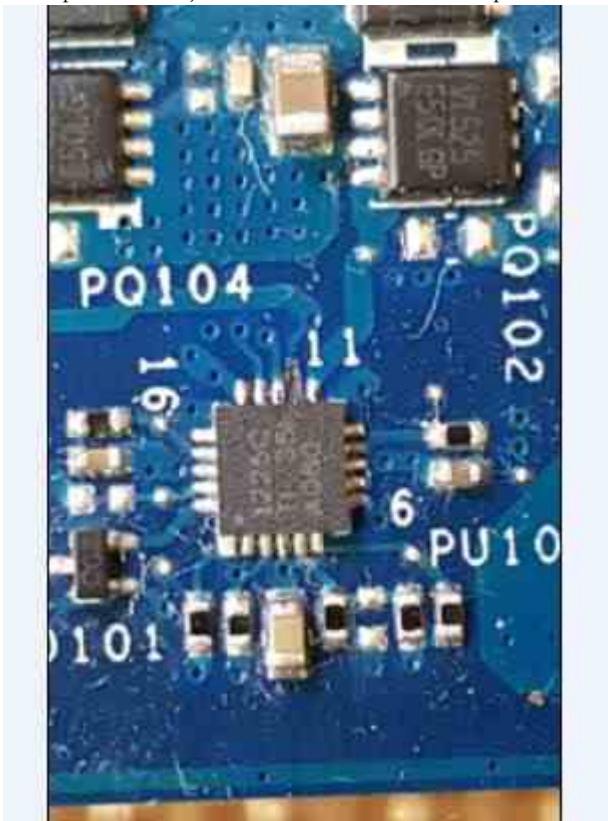
Quickly fold down the motherboard and check that there is water inflow in the standby part of the
notebook. The standby chip bit number is PU100, with physical diagram attached:



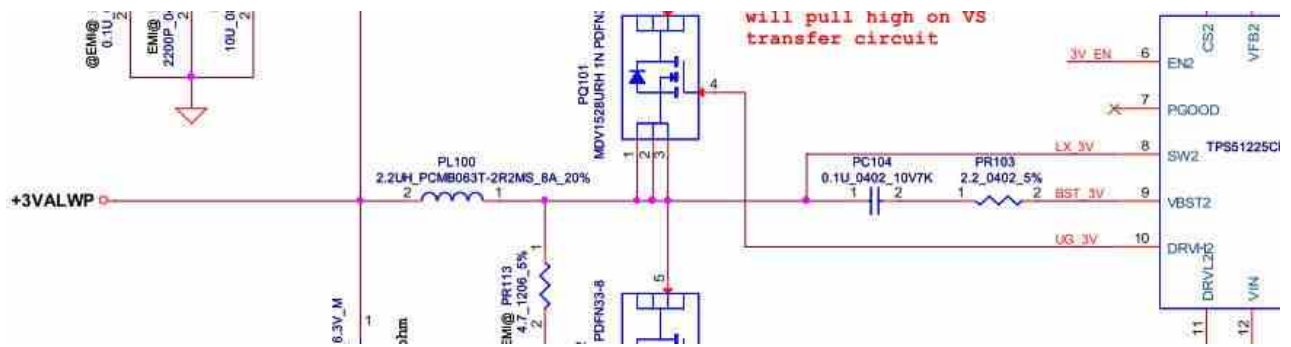


There is also water inflow on the sound card chip. The notebook motherboard is confirmed as not starting up first. So open the circuit diagram to analyze the repair machine.

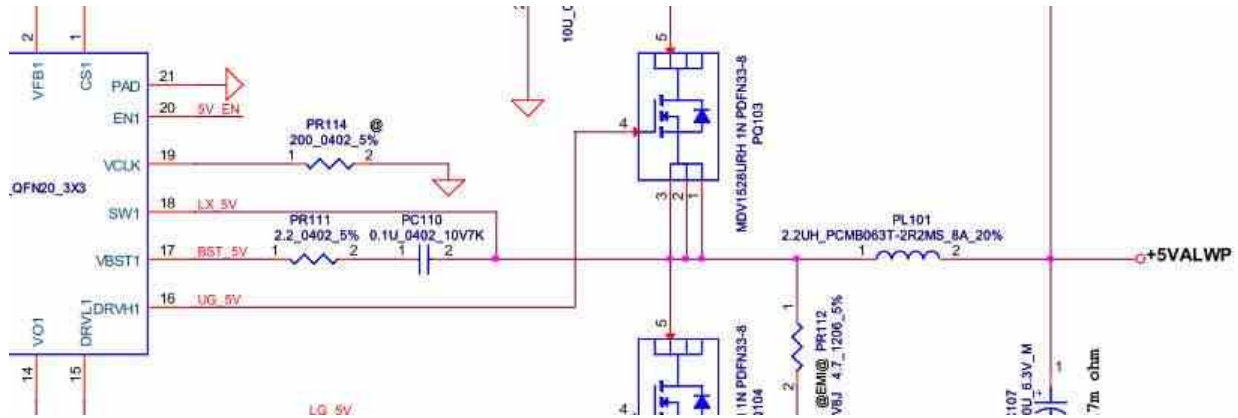
1. Step 1: First, clean the water inlet position with board washing water, and the effect is as follows:



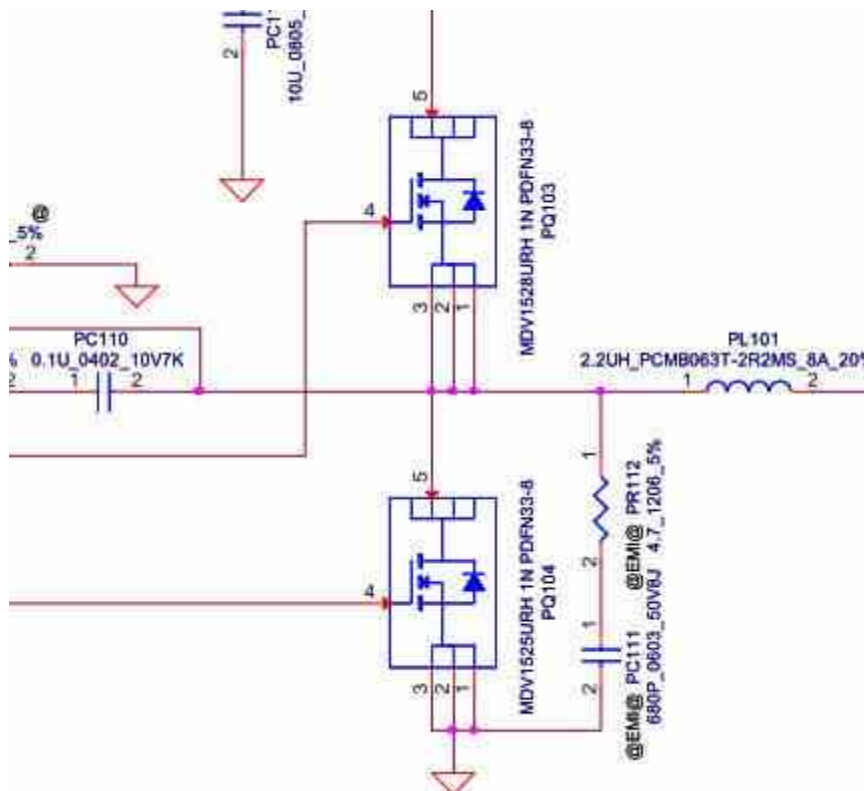
2. It has been found that the oxidation disconnection at pin 12 of the chip, and the signal supplies power to the 3V5V_B+ common point.



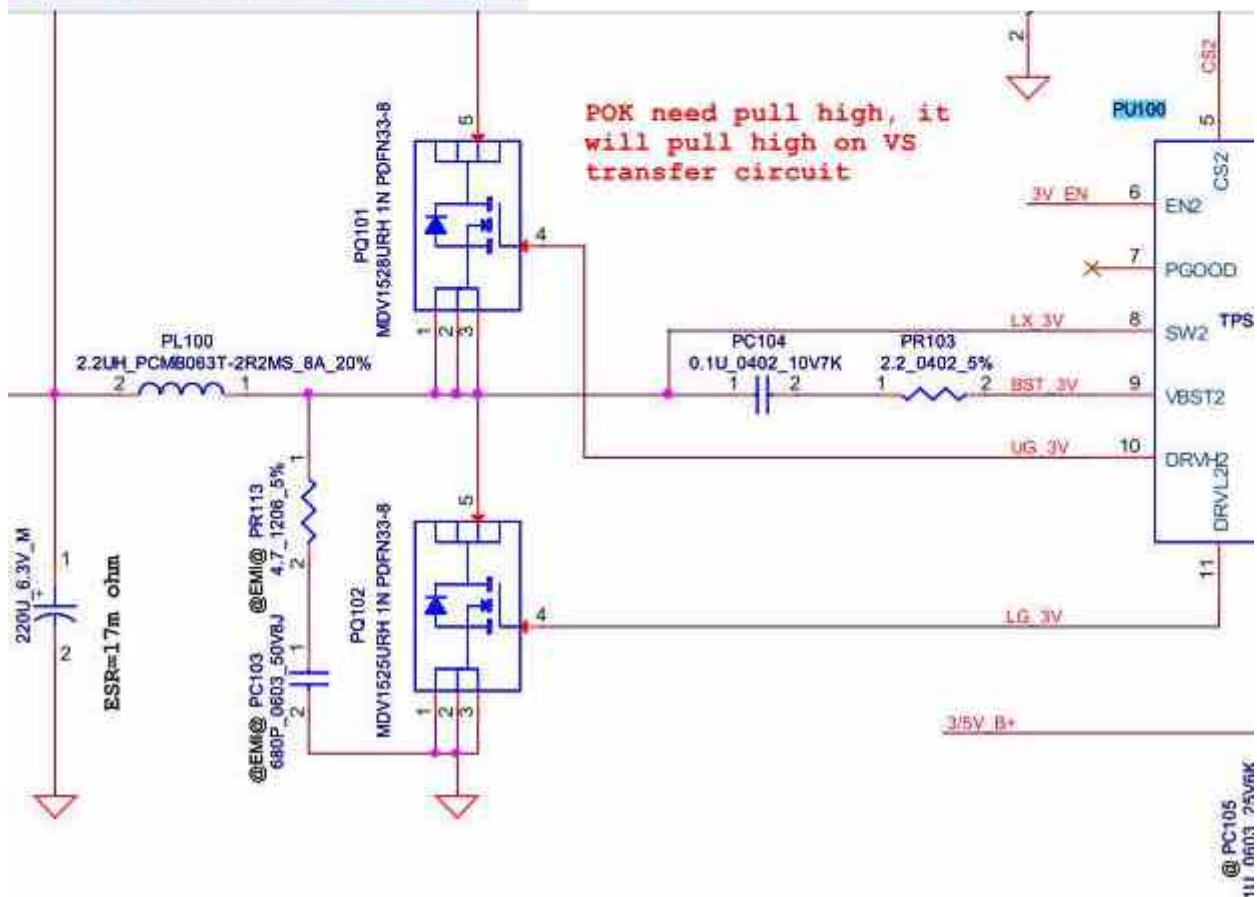
4. The measured PL101 + 5VALWP voltage is also 0V.



5. Notebook motherboard power-off again, with a multimeter to play PQ103, PQ104 on the fourth leg of 500 ohm, and 400 ohm, the resistance is OK.



6. It is good to measure the fourth pin of standby power supply PQ101 pipe on the other side with multimeter for 480 ohms, but only 3 ohms for the fourth pin of PQ102 pipe. Actual measurement and schematic diagram are attached:



7. From the point of view of easy after difficult, first to fold off the PQ102 MOS tube, the value is still the same, the value is 3 ohm. Now analyzing from the drawings only

It may be caused by the damage of standby chip TPS51225C. Quickly fold off the PU100 chip, again hit PQ102 MOS tube pin 4 value for infinity. Find TPS51225C from the material box and weld it on the motherboard. The PQ102 MDV1525 tube removed before has no short circuit between the three pins measured by multimeter, and is also welded on the motherboard. After cleaning the chip and MOS tube, the standby two-way power supply has been normal after the motherboard is powered on. Attached with measured map:



8. Motherboard installed screen and other interface small board, according to the startup key, the current all the way to the motherboard show bright machine OK.

Attached is a bright machine diagram.

