Flood detector project report

Last week I had a big flood in my house. A water pipe broke in the middle of the night causing extensive damage. Wooden floors, furniture, small electronic devices, all damaged by water. It made me think of a project that would feel water on the floor and set off an alarm. The detector should be able to sense the water and set off an alarm. Also it should be small and battery powered. The battery voltage must also be checked. Schematic Parts R1 10K Ohm vs. R2 10K Ohm vs. R3 10K Ohm vs. R4 1K ohms vs. R5 10K Ohm vs. R6 1K Ohm vs. C1 100nF Green 5mm LED LED 5mm Red LED D1 4V Seven zener diodePiezo Piezo HPE-120 VR1 78L05 Regulator IC1 12F683 SOIC Microconfir from Microchip S1 Button Button Others: 9V Battery Clip PCB Metal Strips Hexadecit Program for PCB Microcontell PCB Laptop Used for This Project is its one-layer size 27.02 mm x 32.41 mm. The SOIC version of the MB helps reduce pcb size. Boxes and trackers I tried to find a small box that would fit both the circle and the box. That way it'll be more discreet. The box I used didn't have enough room for all the components, so I had to place both led and piezo on the outside of the box. That detail didn't change anything, because the secretions have to remain visible and the pieso is free to make the loudest sound possible. The trackers can be made from any corral material, but I preferred not to use copper because it deteriorates over time. I think a good material to use is stainless steel or aluminum. However, maintenance should be done from time to time to check the tests and check them with water. Also, the trackers should be placed not to move away from each other and they should never touch each other. More test space is available for better water whispering. The trackers I used in my project are made of aluminum. The trackers are bent 90 degrees and glued to the box. They must always be parallel to each other. The final assembly looks like this.The detector is placed on the floor: it is possible to use some double side film and stick the detector on the wall or just leave it like the picture below. The trackers at the bottom of the box touch the floor and the stripes above. The Hexachix program must keep the hexadic program in microcontent memory before soldering on the PCB. Download the helmet in the download section below. Circuit activation tests, both led and pizzo are tested. The trackers are also being tested. If the trackers sense water or any kind of leakage it will activate the red overfish and it will activate the paiso. After everything's checked, okay, the detector will go into normal. Every 10 seconds he'll check the trackers and battery power. If the water spreads through the trackers, the detector will enter the alarm state where the red wire will be distributed and the piezo will start making a loud sound. The detector will keep itself in alarm mode until the S1 is pressed. If the battery It is good, led green and will flash every 10 seconds but if the voltage reaches 7V led red will flash every 10 seconds and the piezo will make a short sound to indicate that it is time to change the battery. The water detection time is less than 10 seconds. Because the MBR enters a low-consumption mode between calls to preserve battery life, this is always 10 seconds long. If the water reaches the trackers while it is in low power mode it will have to wait until it finishes the sleep mode before it can set off the alarm. This is a simple but effective water detector. I built two units and I have one inside the kitchen and one inside the bathroom. The 9V battery can be replaced with any 9V wall power supply. The main purpose of this project is to identify rising river water levels at a reasonable distance from the railway/roads and intimate that the appropriate authorities via SMS, take appropriate action. Floods lead to huge loss of life and property in many countries. But in developing countries the lack of proper technology leads to loss of life and more property due to floods. This is due to a lack of flood detection systems. Our project solves the problem by implementing an early flood detection mechanism. In this project we will connect electrodes at different levels. Electrodes will interface with µC using an equalizer. A GSM modem containing a SIM card will be connected to µC. Mobile devices will be used at the other end. A user's mobile phone number will be stored in µC encoding. Every time the water levels reach the electrodes. SMS will be sent to mobile. Mobile.