

One day, my friend introduced a user to me, the user needs to develop a project: increase a small LCD screen on embedded host and use a serial port and parallel port control that be used to display some graphic data and some clues. Since I was not very busy at the time, and I felt that the project was not too difficult, I should have accepted it.

The contract stipulates that the design can be completed in one month and can be put into production. The development fee is 5,000 yuan (ten years ago), and we will provide the products with a price of 300 yuan per set.

The situation was: I never learned a single chip! I have not heard of the learning board, emulator, PCB .I majored in physics, and I took the course in electronic circuit when I was in college, and I had some experience in industrial control over several years, but I only applied it. Fortunately, I have taught myself C language, and I have written many programs in BORLANDC2.0. I am familiar with serial programming.

I quickly went to the bookstore and bought two books, named "McS-51 single-chip computer application design" (Harbin institute of industrial), "the principle of computer parallel port", and then found some materials in a company selling liquid crystal to start study. Once I went to the Zhongfa electronics

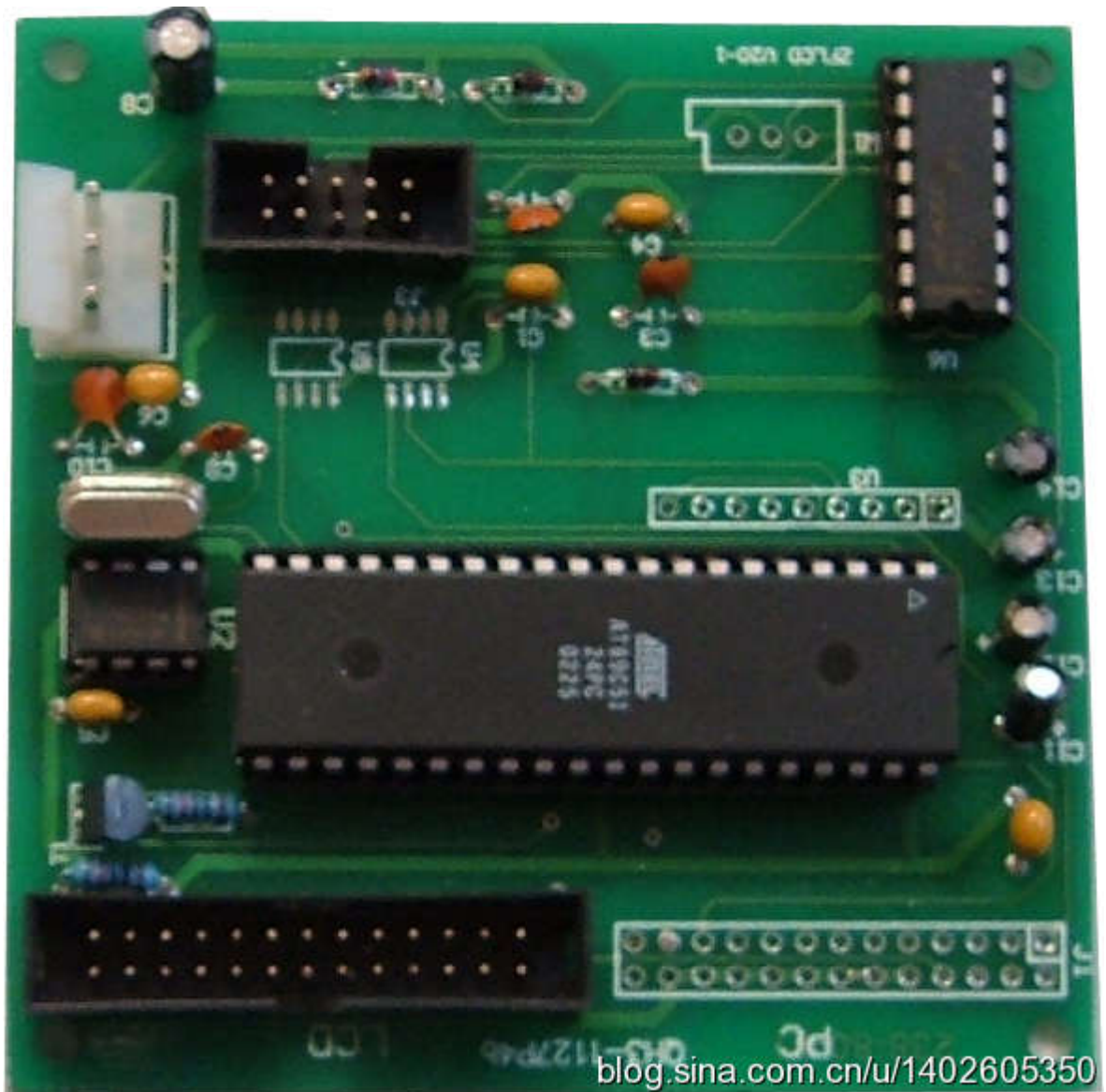
market to buy components, just saw a similar board: a 12864LCD controlled by AT89c51 , I buy it to study hurriedly, mainly to copy the circuit above .

According to these data, I design the circuit first , then request the board company to draw the PCB, welding circuit board by myself. Then I learn programming 、 purchase programmer, and use the environment of WAVE. Because of the C language and the programming principle is the same, so program is not a problem, only is the language environment is different. The program of PC serial port and parallel use BC2.0 , and give Jiafang the final C source code program, they are convenient to convert to Linux.

Finally I finished the project in time! I feel incredible and accomplished. Since then, I like the "carrot and stick" .

Later, hundreds of products were made for the user, making tens of thousands of yuan. After the introduction of some friends and some old customers, I continued to undertake some development projects, and kept on going.

This is the product that I designed at that time (is it very low) :



From which I concluded:

1. It is not difficult to learn the introduction of single-chip computer.
2. Learn quickly and learn more quickly while working.
3. Learn forced by users, you will be motivated. Money, of course, is powerful;

4. Opportunities are always for those who are prepared.

I call this method of "project-driven learning", which can be regarded as a typical example of "the unity of knowledge and practice". Of course, I wouldn't have dared to take this project if it hadn't been programmed in C.

I do not encourage everyone to learn the single-chip microcomputer, which should vary from person to person, but the accumulation of knowledge and the cultivation of self-learning ability are important. Only in this way can you catch the opportunity when it comes.

Weibo ID: @treeos Lin Tianxiao