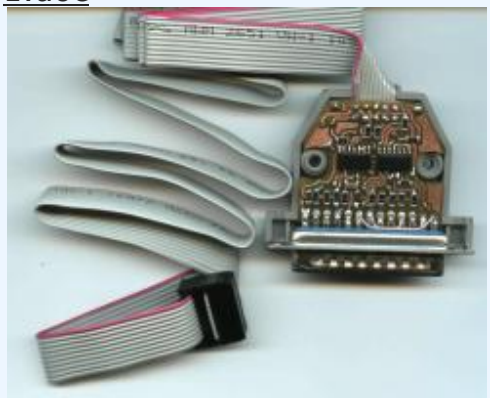
The FlashBlaster2 programmer is a successful development from http://www.dilogic.hr , although there is also a proprietary EC2. I have been using FlashBlaster for two years to program F064, F310, F320 and F127 (both through JTAG and C2). The cable length is about 1 meter. The programmer is convenient and fast. For those who want to make a programmer, as well as in the exchange of experience - a photo of another sample, as well as a diagram and image of the board in Protel-DXP (the board is made independently).
Successes. :)
1.doc

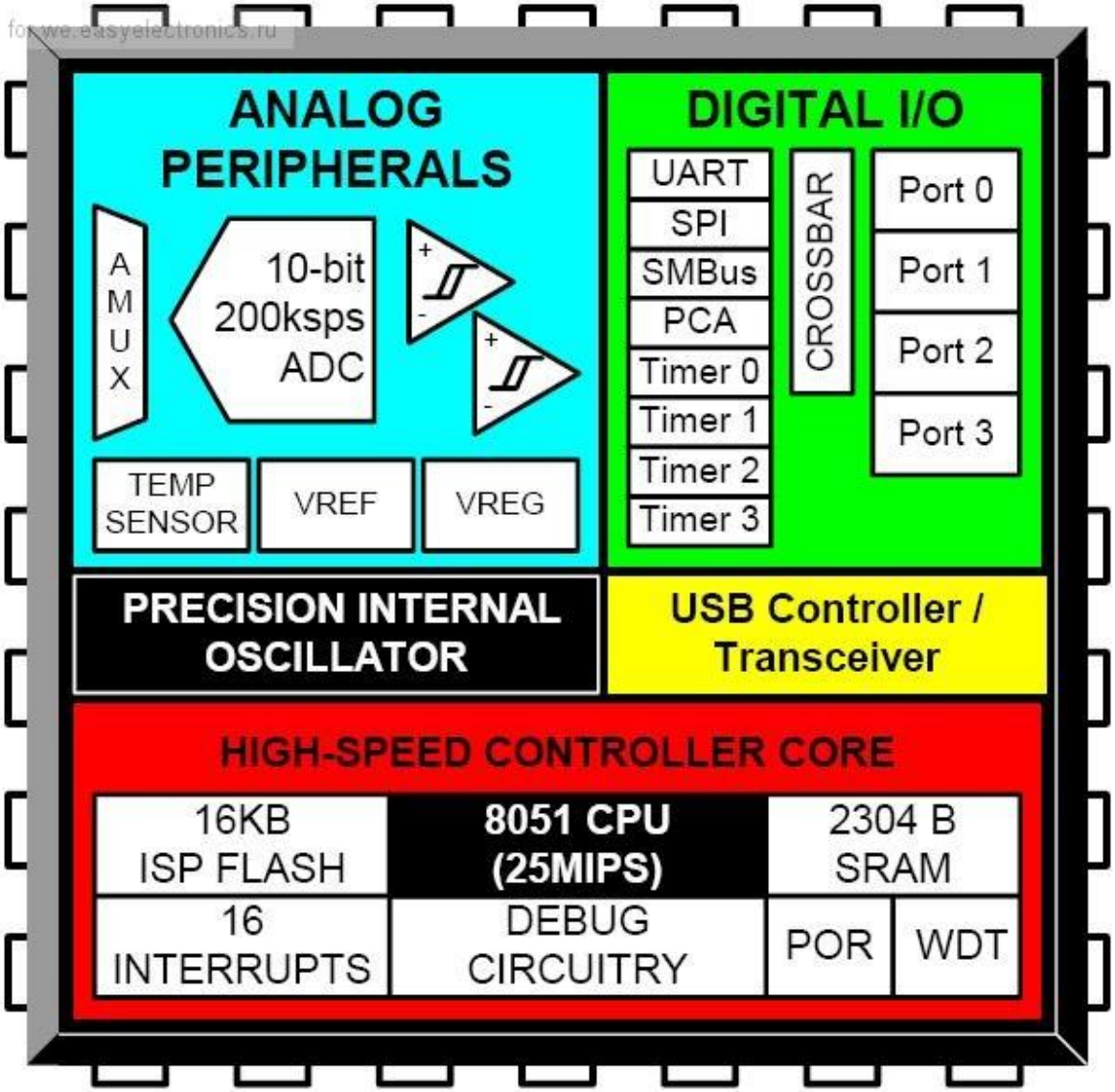


The company **Silicon Laboratories** SILICON LABS is considered (or today "read") the worldwide leader in the creation of high-performance, analog-rich mixed-signal integrated circuits. To say so or not, it is possible by comparison - today there is something to compare with.
Silicon Laboratories 8-bit mixed-signal MCs occupy one of the leading positions in the electronic components market for two main reasons:
→ **the** fast-response (clock frequency up to 100 MHz) processor core CIP-51, which is fully compatible with Intel 8051 microcontrollers, whose command system it is essentially an international standard; many software design tools and finished programs have been developed for it;
→ **A** wide range of precision analog peripheral units.

A complete list of all Silabs MK currently manufactured and their parameters can be viewed on the MCU Parametric seach website. All microcontrollers form a series of families with special properties. Within each family, there are a number of modifications that differ in quantitative parameters (primarily the number of case leads). The designation of each MK contains a character string “C8051F”, followed by a three-digit decimal number of the MK modification.

When I first learned about the existing Silabs company (yes, these MKs were

originally produced by the CYGNAL office) and got acquainted with the then available MKs, I really wanted to feel this "microcosm". The question immediately arose: the question is: from which controller should I start to study this family? The choice was not great - both in terms of accessibility and in my modest finances. And for some coincidence, I got a certain **C8051F320** .
What I want to say is a noble little thing in its class. For reference, I'll give a brief description of this product:

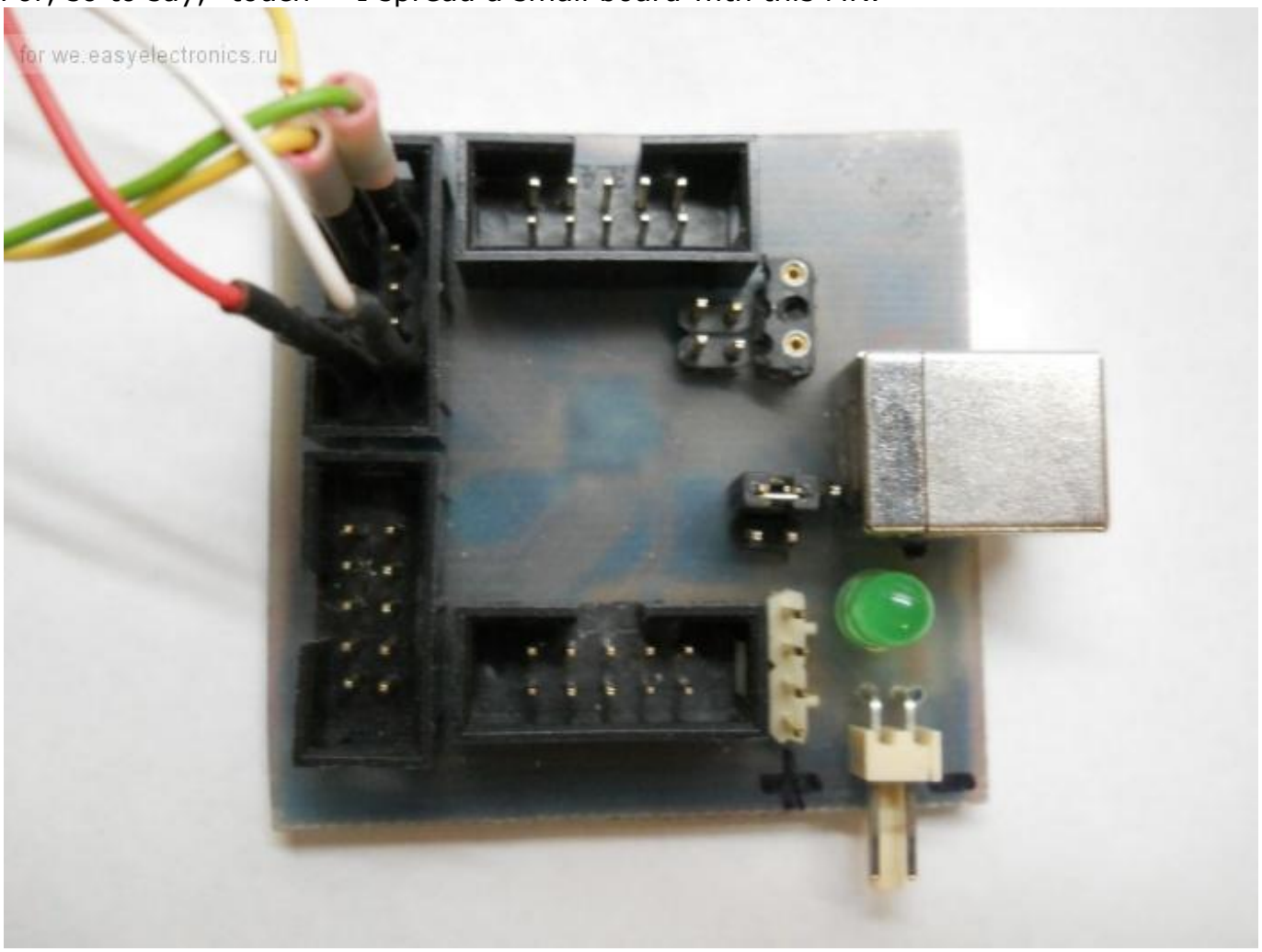


I think the description above is fully given. If that is more detailed - all questions to the Original documentation. Yes, by the way, quite a lot of translated documentation (original) into the great and mighty Russian language. What undoubtedly is +, and what sin not to use. During the use of the translated documentation on your MK, no errors were noticed. It is

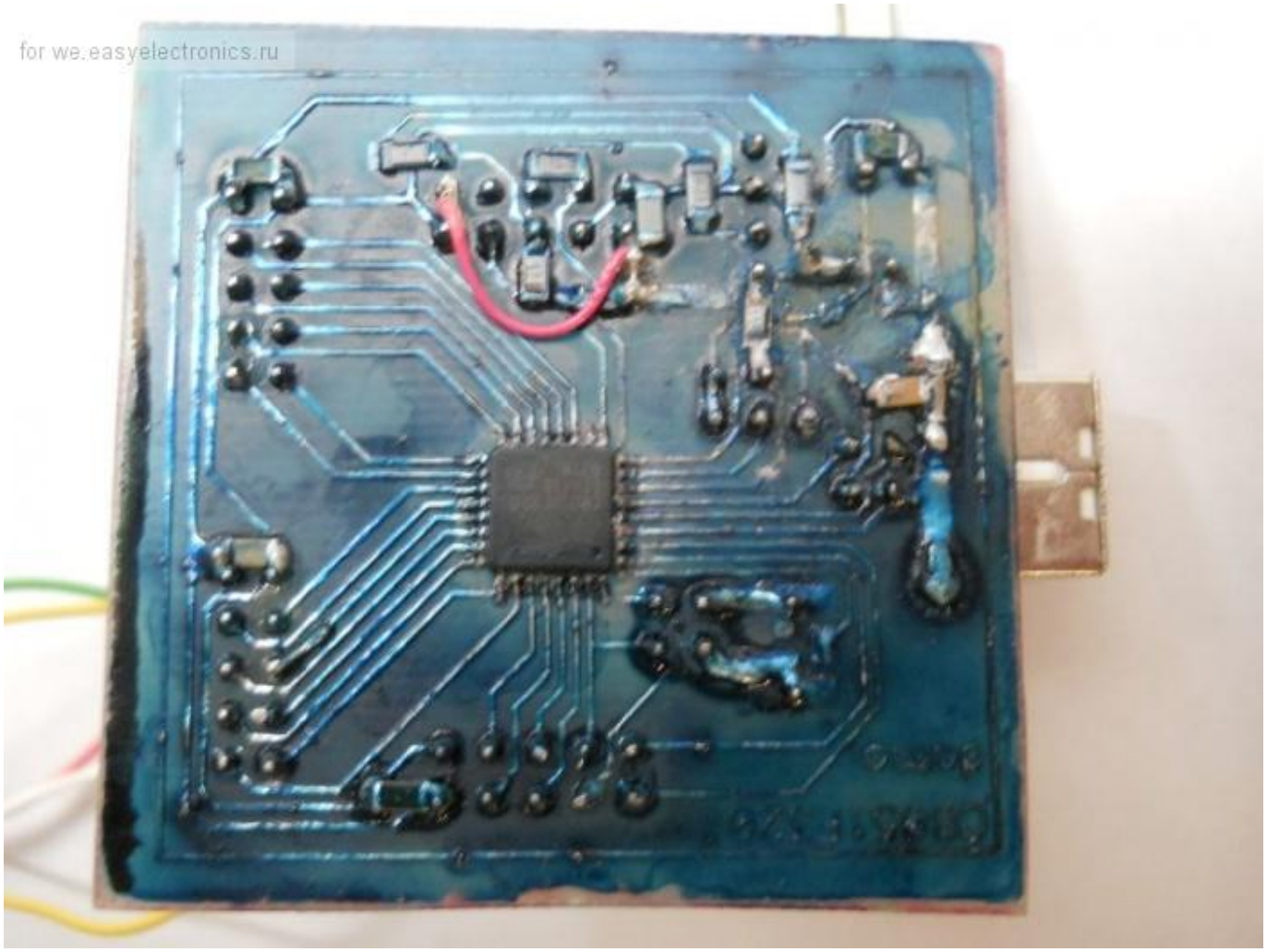
possible that just did not come across.

One of the features of configuring MK data is the prioritization of each input / output function. It is implemented using the “Priority Matrix Decoder”. If any digital resource is selected, then the unassigned port pin with the lowest priority is assigned to this resource. For example, the I2C interface pins - SDA and SCL - can be assigned to any of the possible and unused pins. On the C8051F320, these are pins P0. (0,3,4,6) for SDA and P0. (1,4,5,7) for SCL.

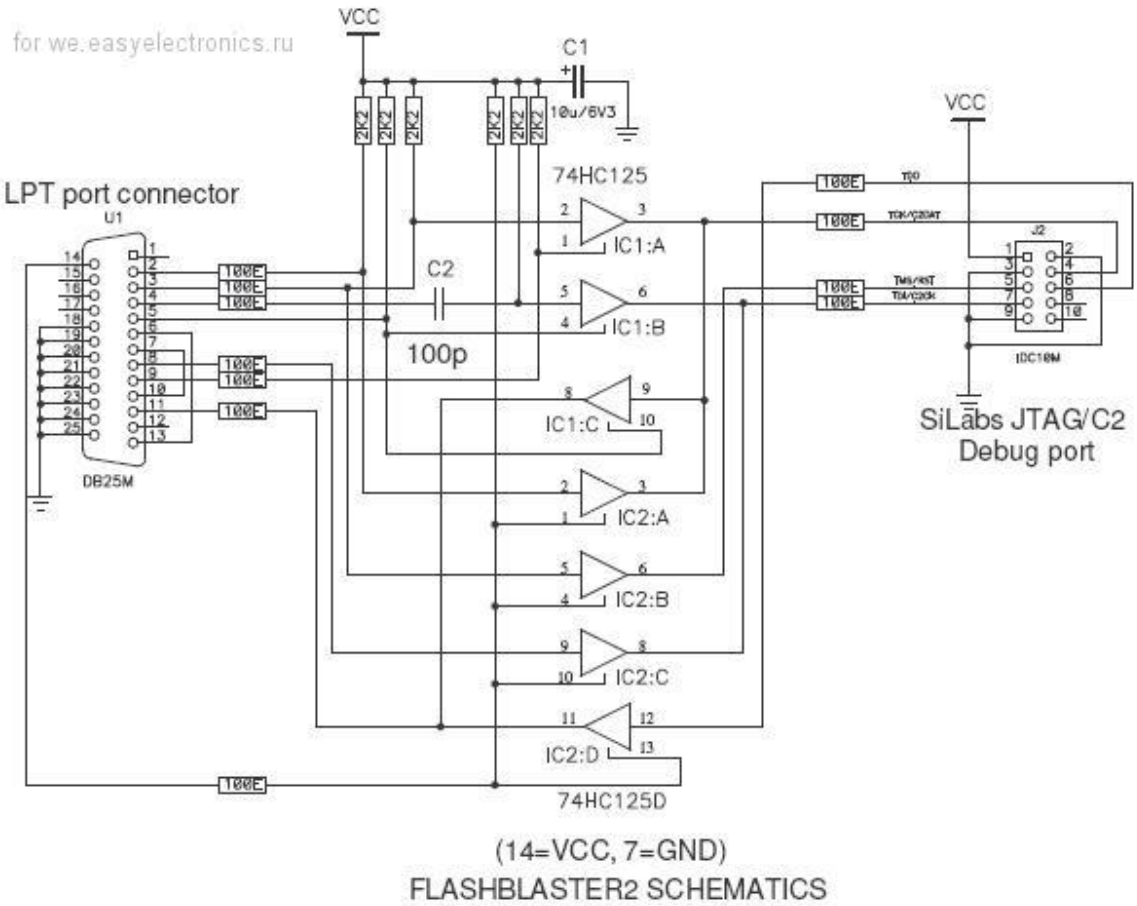
For, so to say, "touch" - I spread a small board with this MK:



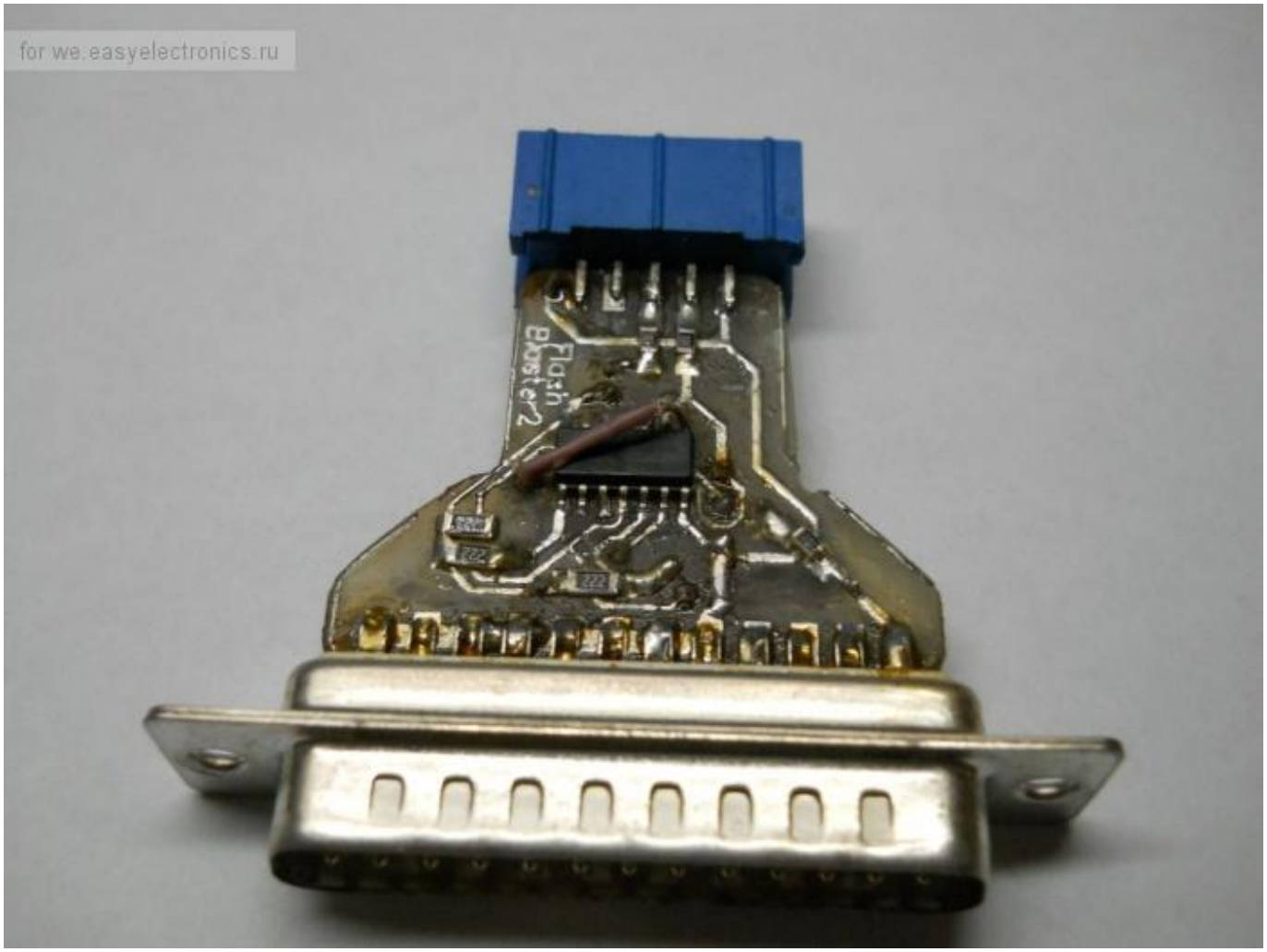
minimum - all the I / O lines, the ability to connect external quartz (although there was enough internal quartz with the head), power switching (external or from USB) and a separate C2 interface connector (4 pins).



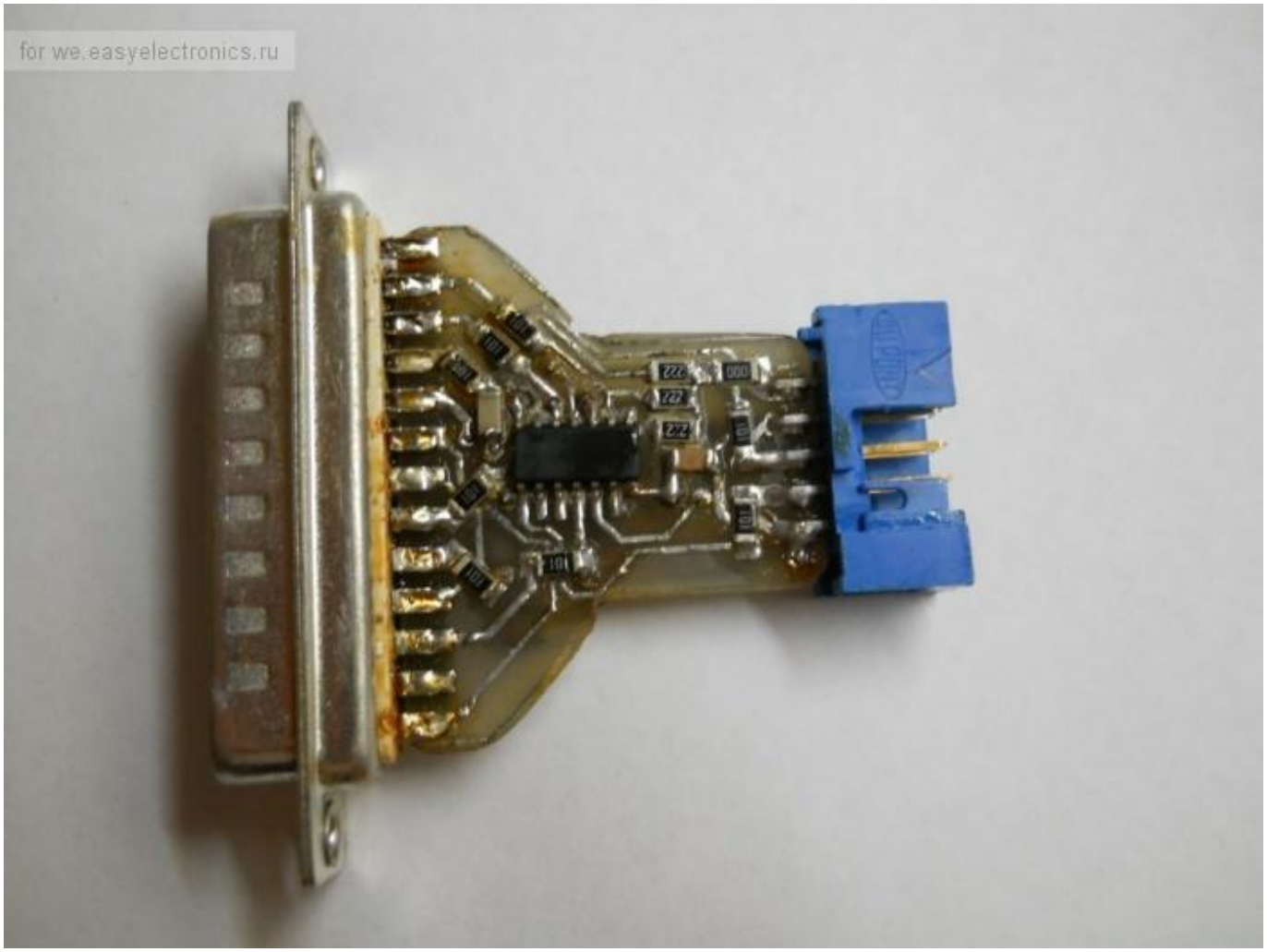
For writing software used development environment**Silabs IDE** . Silabs IDE uses **Keil '** Olva compiler for x51, something like "the boxes are different, the filling is the same." For almost every MK family, Silabs IDE has examples for working with different peripherals of each microcontroller, starting from I / O lines and ending with USB / CAN interfaces.
Programming Tools. What I especially liked is the process of "cutting and sewing". This MK is stitched sequentially. Different families have two types of Programming / Debug interface - JTAG and C2.There are two programmers: EC2 and EC3. One on the COM port, the second on USB. Using them, you can flash the MK and debug the program both on the JTAG interface and on C2 (depending on the MK used). Flashblaster2- The easiest programmer to connect via LPT for all C8051Fxxx microcontrollers. It is assembled on the basis of two 74HC125 microcircuits.



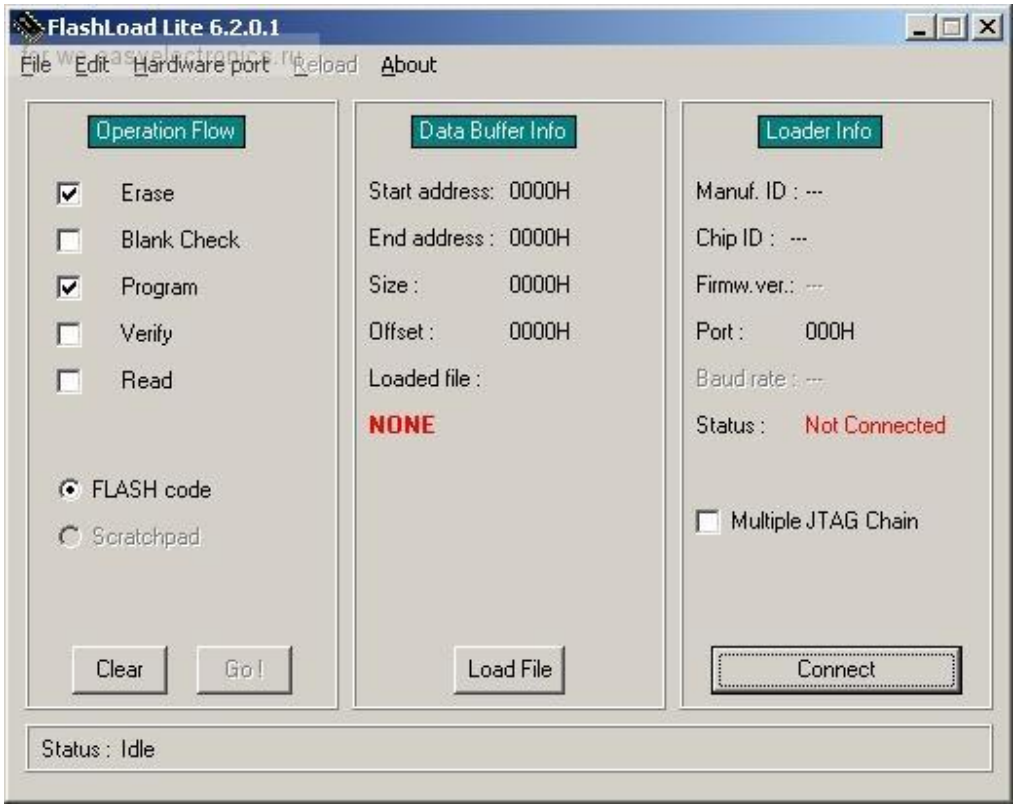
Therefore, quickly for wiring the board! It turned out a two-sided board for this programmer - we managed to fit it into the LPT connector housing.



During the installation, I ripped the track on the board with my crooked hands. I had to build towns.


for we.easyelectronics.ru

The software for uploading the program via FlashBlaster can be found on the Dilogic website. **FlashLoad Lite**



PS I didn't attach the PCB files for the breadboard and programmer. If anyone needs to, I will add.