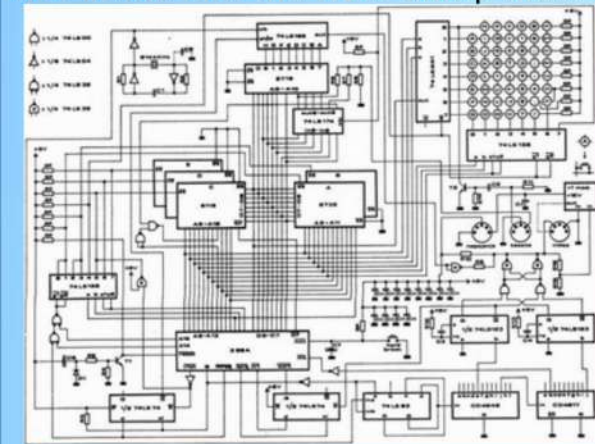
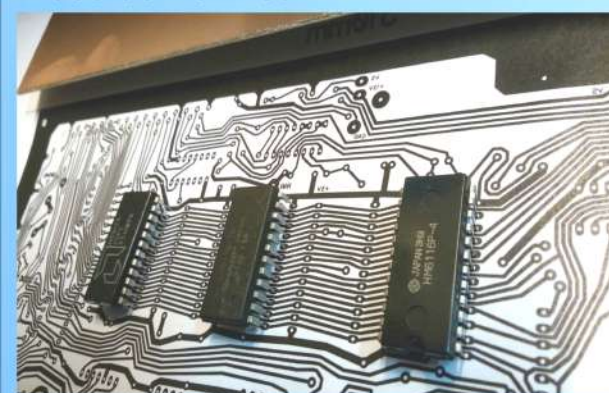


This historical and cultural context led us to build a working Galaksija (**Zilog Z80** chip based) prototype. First of all, we found on the web some low-resolution vintage magazines scans and the ROM dump files.



We worked a lot, editing the scans, to get the PCB design. The project is then entrusted to **Antonio Caradonna**, our Laboratory manager, who decides to go on using the old artisanal methods, contemporary to the original prototype, renouncing to the help of industrial companies. This will increase difficulty, though becoming a precious source of experience. Initially, the design's dimensions must be verified.



Subsequently we clean the copper base.



The PCB design is larger than the base so we cut the design borders. The first imprinting attempt is carried out using the **Press-n-Peel** method.



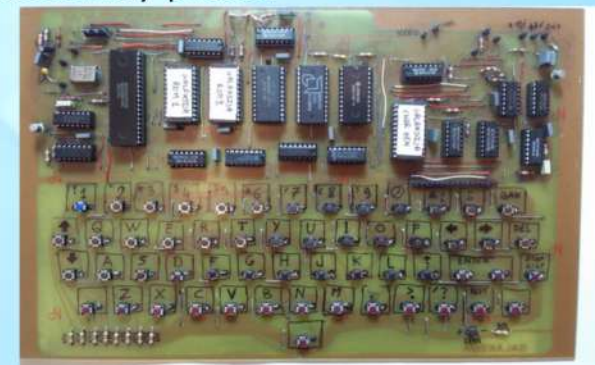
But the paths transfer on the base is unsatisfactory, so a further attempt is made by printing the PCB on a sheet with a **laser printer**, thus performing the transfer on the base with the help of a heat source (a modest flat iron!). The result is pretty good.



We carry out the engraving using **ferric chloride** with good results.



The copper undergoes an oxidative process. We used an insulating protective spray to move on to the assembly phase.



Gianfranco Mazzarello goes on debugging (verifying the PCB integrity and the electric paths continuity, testing the components). A logical probe proves to be insufficient tool for this purpose. So we decide to purchase an **oscilloscope**.

Testing the video output circuits reveals only the video sync signals. Further researches determines that the Galaskija project is not compatible with the modern Z80 processors. Gianfranco then "sacrifices" a Z80 produced in 1983 and gets this.



The ROM, RAM and BUS testing lead to discover a folded leg under a socket. After putting some pressure on the integrated sockets, the Galaksija starts!



Our brief history:

Traveling Museum

- Apulia Retrocomputing 2013, Bari, Ass. Altair
- Informatica Storica 2013, Bari, Ass. Nautilus
- Vintage Computers 2013, Bari, ITIS Panetti
- Back to the Future 2014, Bari, Museo Panetti
- Viaggio nel Retrogaming 2015, Bari, SMS Michelangelo
- Computer e console d'epoca 2015, Brindisi, ITT Giorgi
- Storia dei computer Apple 2016, Bari, Multisala Showville
- Il Computer: ieri ed oggi 2016, Cassano M. (Ba), ISS Da Vinci
- Vintage Computers 2016, Fasano (Br), Ass. ARI C. Grotte
- Insert Coin 2017, Bari, Ass. Alumni Matematica
- Computer e console d'epoca 2018, Galatone (Le), IISS Medi

Books

- Sulla Cresta...del Baratro (ISBN 9781326519438)
- Collana EVM Computers
- Digital restoration - Reprint*

Education

- Theoretical and practical workshops


Events

- Presentation of "1977-1987 Quando il Computer divenne Personal" 2015, Bari, Caffè d'arte DolceAmaro
- Screening of the movie "The Commodore Wars" italian premiere 2017, Bari, Spazio Murat

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 APULIA RETROCOMPUTING

GALAKSIJA REPLICA PROJECT

80s. Imagine you're a young Yugoslavian computer hobbyist. You don't even know why you like computers. Maybe you read something in foreign newspapers, maybe a friend, back from a trip, told you amazing things about Basic. Well, good luck!!

Imports that exceeded 1500 dinars (about €70), were forbidden in **Yugoslavia**. So, apart from some very expensive items on the black market, it was impossible for the average citizen to get any form of personal electronics that was more evolved than a hair dryer.

That's why Serbian **Voja Antonic** invented the **Galaksija**, a do-it-yourself computer with a modified version of BASIC that anyone, with a minimum of computer skills, could assemble and program. He had this idea during a holiday in Montenegro while thinking about the chance to create a computer for everyone without using expensive graphics cards, generating its own interface using the CPU.

