The Pentagon LEO 1024 computer is assembled on a real Zilog Z80 processor. The main element of the circuit is the CPLD ALTERA EPM 3128. The computer has a real floppy disk controller (beta disk interface) on the MB8877 controller (KR1818VG93). The board also has a floppy disk emulator (GOTEK OpenFlops project). The computer has a TURBO SOUND assembled on two YM4129 or AY-3-8910 chips. The board has two NEMO BUS expansion connectors. To be able to connect to modern displays, the board has an RGB-VGA (HDMI) converter (open project from Alex EKB). As a ROM, you can use the 29C040 chip, which can store up to 8 images. Switching images is done with a DIP switch. The computer has proprietary Pentagon-128 timings, which allows you to implement border effects. The computer is easy to assemble and does not require any adjustments. If assembled correctly, it works immediately.