

Today, the most modern method for providing telephony is IP-telephony. But communication via the Internet isn't always possible, or you need to connect to the phone, that is connected to the traditional phone network, not to the IP-network. So in such cases, the use of the VoIP-gateway is actual.

VoIP-gateway - a gateway, designed to transfer voice traffic between the networks of traditional telephony and data network. The article studies digital VoIP-gateway that is joined to the E1-carrier. Existing implementation of the gateway based on the DSP was analyzed. The reasons of switching the hardware basis for the gateway from DSP to FPGA were stated. The VoIP-gateway implantation to the system was also examined and analyzed.

The purpose of work is to design and to implement on FPGA gateway for transformation of the audio data from packet-switching network to circuit-switching network. The designing device will be a part of VoIP-gateway. The device should work in the specific conditions that are determined.