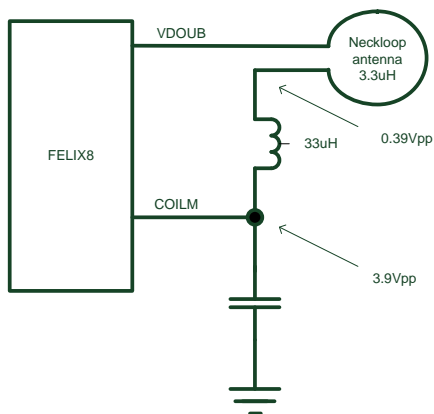


Description of the changes of the EasyTek electronic design

Preface

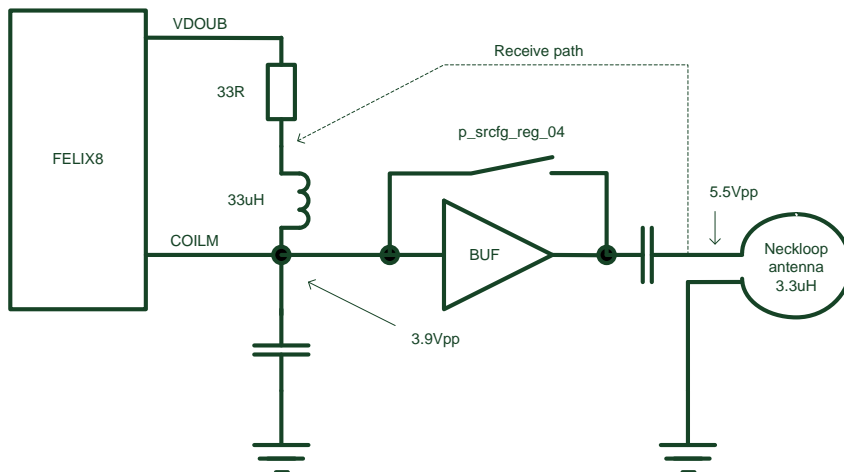
The electronic design of the EasyTek was modified to achieve higher transmission power of the magnetic inductive transmission in the 3.28MHz band. The aim is to achieve more stable communication link with particular types of the hearing aids.

Topology of the sender prior to the change



The antenna loop is connected in series with ballast inductance, the voltage on the antenna is 0.39Vpp in transmit mode.

Topology of the sender after the change



The same unchanged antenna loop is connected via a buffer in the way that voltage on the coil is 5.5Vpp. With this measure, higher transmit power (+23dB) is achieved. The circuitry can be controlled by the firmware of the EasyTek to select between unchanged transmit power (+0dB) and increased transmit power (+23dB) according to the connected hearing aid type.