Cairo University
Faculty of Engineering
Systems and Biomedical Engineering
Bioelectronics

Final project

Submitted to:

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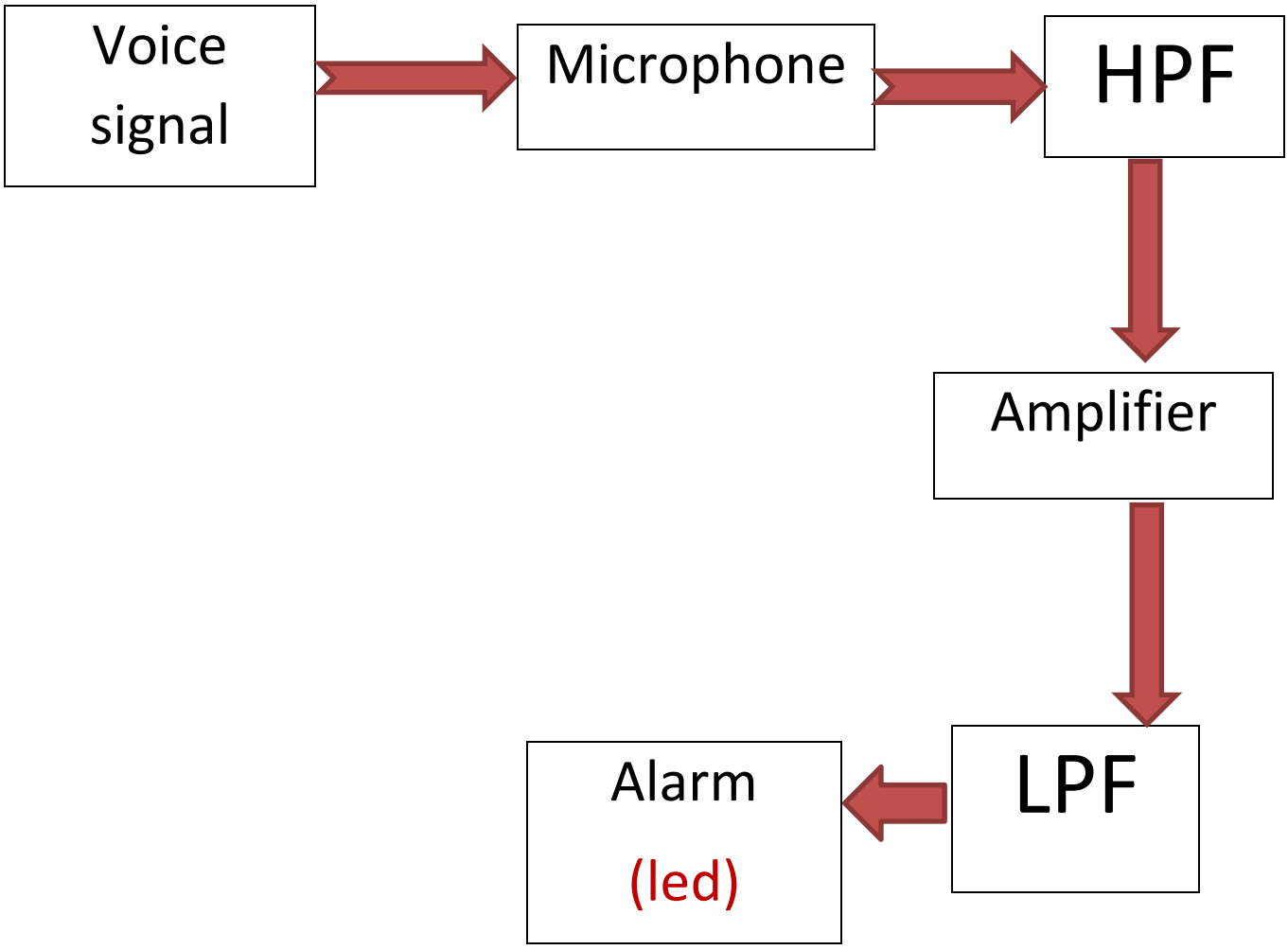
Block Diagram



Description

The output of an electret microphone (hooked up according to its datasheet through a band-pass amplifier based on an LM324 operational amp. the op-amp circuit has both a high-pass portion (R3 AND C1) and a low-pass portion (R4 AND C2). the circuit attenuates frequencies above f=1/(2∏R2C1)=250HZ and frequencies below f=1/(2∏R5C2)=4kHZ. the op-amp acts as a non- inverting amplifier with a gain(1+(56/1)=57v/v then the system in reality enables a led or an alarm when noise is detected in this frequency band which 250-4000HZ, the noise levels inside and outside the incubator.

circuit design