

Design of Processing System of Vibration Signals

Zeng Fan,Zhu shijian, Lou jingjun

Summary

A signal processing electric circuit used in vibration signals processing system has been designed, which contains the pre-amplifier, the single chip ATMEGA16 and the microprocessor programmable MAX262 and so on. Its feasibility test is carried out. The center frequency and other parameters are input into the computer by VC software programmed, and the computer sends these instructions to the single chip. The single chip controls MAX262 filter to work regularly and the noise signals are well filtered. The signals output from the data sampler are analyzed and processed, and the vibration signals can be clearly recognized. The experimental results show that the designed signal processing electric circuit is feasible and its effect of application is good.

