

Figure 7: ISD1600

REC: level-triggering for recording.
PLAY: edge-trigger for individual message or level-trigger for looping playback sequentially.
ERASE: edge-triggered erase for first or last message or level-triggered erase for all messages.
FWD: edge-trigger to advance to the next message or fast message scan during the playback.
VOL: 8 levels output volume control.
RESET: return to the default state.

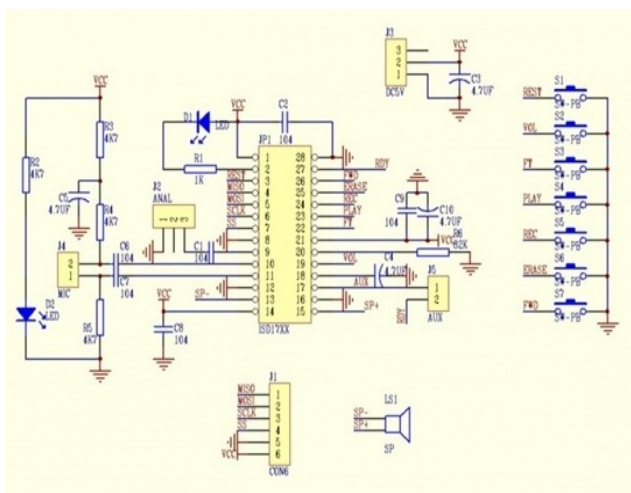


Figure 8: ISD1600 interfacing

8. Conclusion

In this paper, presented work on gesture recognition through the use of MEMS accelerometer. This work used 3 axes acceleration values, where the existing system used only 2 axes values. So, it provides accuracy of this system. The system consists of one ADXL335 accelerometer for sensing the hand posture, a microcontroller and display unit with speaker. The incoming acceleration value for each gesture will be compared with values in the stored templates. Since the standard gesture patterns are generated by motion analysis and are simple features represented by only acceleration values, big data base and complex recognition systems were not required and now needs to collect as many gesture made by different people as possible to improve the recognition accuracy. The advantage of this approach is the potential of

mobility. The main aim of this work is to make a system which can act as an artificial vocal tract of speech impaired people without the use of complex form of inputs. In this work used a simple MEMS accelerometer which is very easy to wear and it doesn't need any special training, so it's user friendly and can be used by all.

9. Future Scope

Researchers are going on development of hand gesture recognition using nervous system of human. A system with more advanced algorithm than proposed and existing one have to developed, and use the same to detect gesture made by the people for automation.

10. Result



Figure 8: Sign languages into speech language



Figure 9: Health monitoring report through android smart phone

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