TOSHIBA

Software IP Speech Codec
Demonstration Board
TMSI-SC-V2

Outline:

This speech codec demonstration board was created to evaluate the sound quality of Toshiba original speech codec and to support the speech codec development environment.

This demonstration board includes a microcontroller incorporating the Toshiba original software IP speech codec, which has realized 1/2 encode/decode (patent pending). It can demonstrate sound quality evaluation, time signal output and recording/playback, and enables speech data transfer to/from a PC.

The microcontroller used on this demonstration board is the TMP86CS44U (under development), which is based on the TMP86CH47U and has expanded ROM (60 Kbytes) and a D/A converter.

Functions:

1) Demonstration of sound quality e valuation

Enables comparison between speech data using the Toshiba original codec technology and PCM Speech data.

Speech data of three sampling frequencies (4 kHz, 6 kHz, 8 kHz) are available.

2) Demonstration of time signals

Produces time signals as an example of combining several Speech data components.

Example:

3) Demonstration of recording/playback

Enables recording of encode Speech data and playback of decode Speech data using the Toshiba original codec technology.

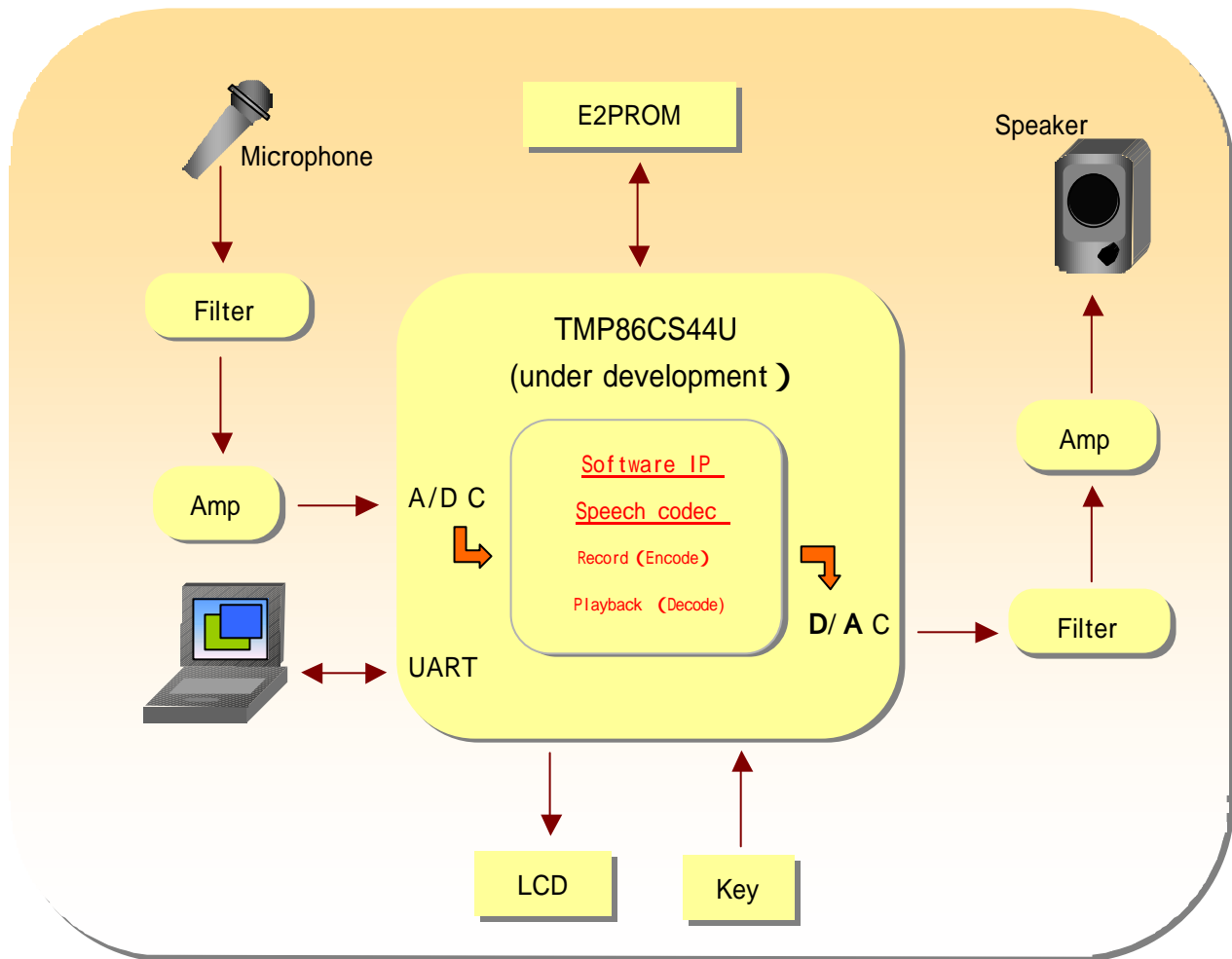Three units of Speech data can be recorded, each for up to 10 seconds.

4) Speech data transfer between the demonstration board and a PC

Enables Speech data transfer between the demonstration board and a PC application.

The data downloaded from the PC can be played back on the demonstration board, and the data recorded on the demonstration board can be sent to the PC.

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Block Diagram

Actual Product