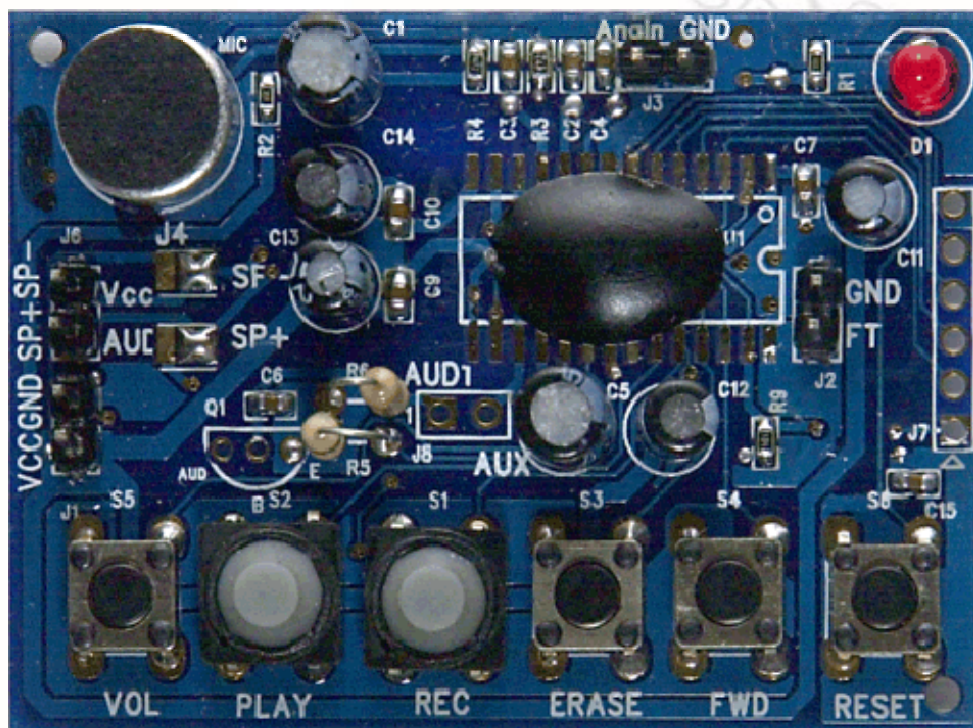


ISD-COB17x x x User's Manual



DESCRIPTION:

The ISD-COB17_{xxx} is a COB/demo board for ISD1700 series. It has either an ISD17_{xxx} die or ISD17_{xxx} SOIC unit assembled, where _{xxx} represents the duration, to demonstrate the functionalities and voice quality of the ISD1700 device. The default settings for sampling frequency and output are 8kHz and PWM speaker outputs, respectively.


Product supported	Ordering Code
ISD1730 / 40 / 50 / 60 / 90 / 120 / 150 / 180 / 210 / 240	ISD-COB17 _{xxx}

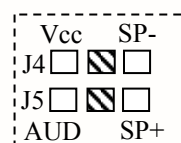
where _{xxx} represents the duration

CONTENTS OF THE KIT:

- The ISD-COB17_{xxx} COB/Demo board
- User's manual

HARDWARE CONNECTIONS:

- Connect a speaker and a power supply to the related terminals. Please ensure the polarity of the power is correct to avoid any damages to the demo board.
- When Analn recording or feed-through (FT) is required, simply connect the related signal to the Analn and ground points and/or connect FT jumper for FT mode.
- Speaker/AUD selection: Default setting is speaker output. If AUD is needed, remove the connection from center pad  to Sp- (Sp+) pad of J4 (J5) and re-connect the center pad to Vcc (AUD) of J4 (J5), as shown below. Also, need to install a jumper at J8 (AUD1-AUX) for AUD output.



OPERATIONS:

Standalone Operations:

To Record, simply press-and-hold the **REC** button and speak to the microphone. The LED stays on while recording. Release Record button to stop recording.

To Playback the recorded message, pressing **PLAY** button once plays the message and it stops automatically when completed. During playback, pressing **PLAY** button again will halt the playback operation. While playback operation, the LED flashes.

To Erase a message, simply pressing **ERASE** button will erase the message when it is the 1st or last message.

To Forward to the next message, pressing **FWD** button once will advance to the next message.

To change the Volume, pressing **VOL** button once will alter one volume level.

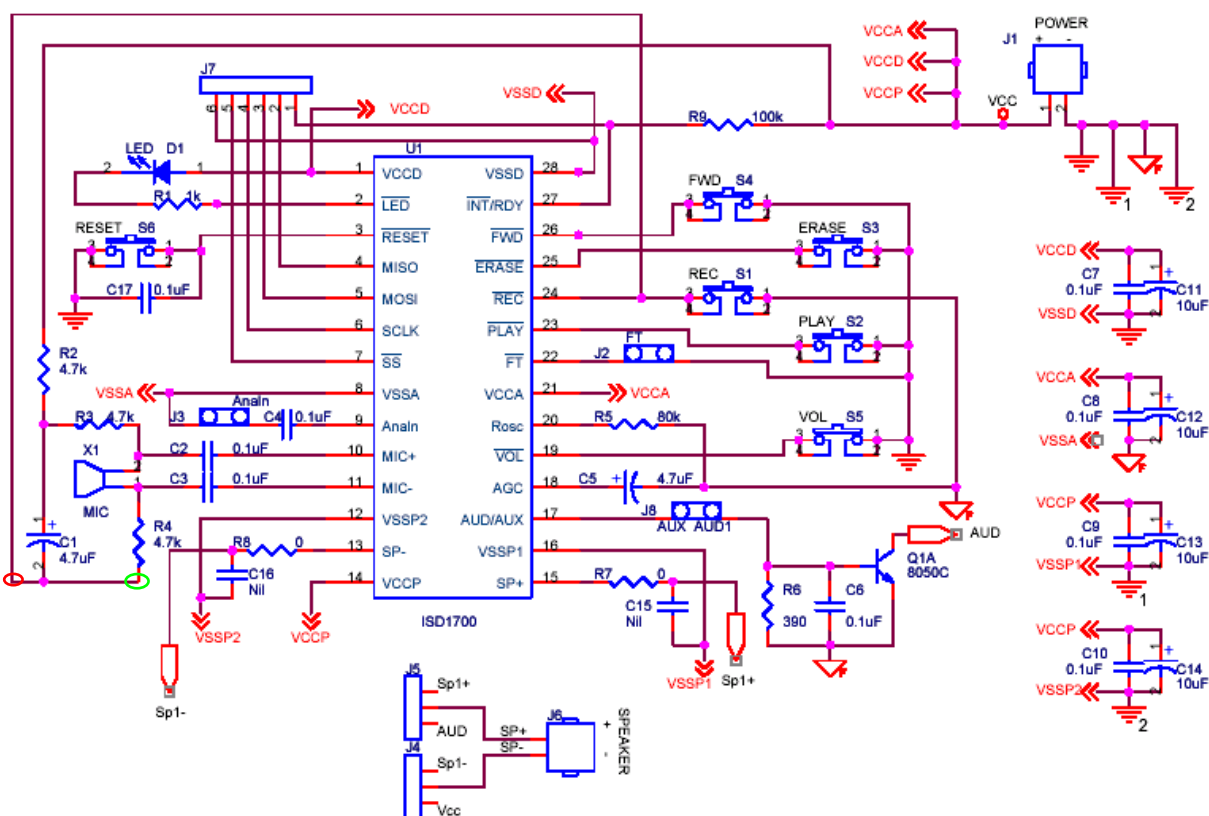
To vary the sampling frequency, change the Rosc (R5) to the desired value.

SPI Operations:

For the purpose of saving power, the MIC bias circuit has no ground when the REC button is not pressed. However, this will cause SPI recording have no signal source. To fix this and make the SPI interface fully functional, please do the following change (shown below): cut the line at red oval place, and connect ground at the green oval place.

After fixing the board, now user can connect the SPI signals to the SPI terminal and start evaluating.

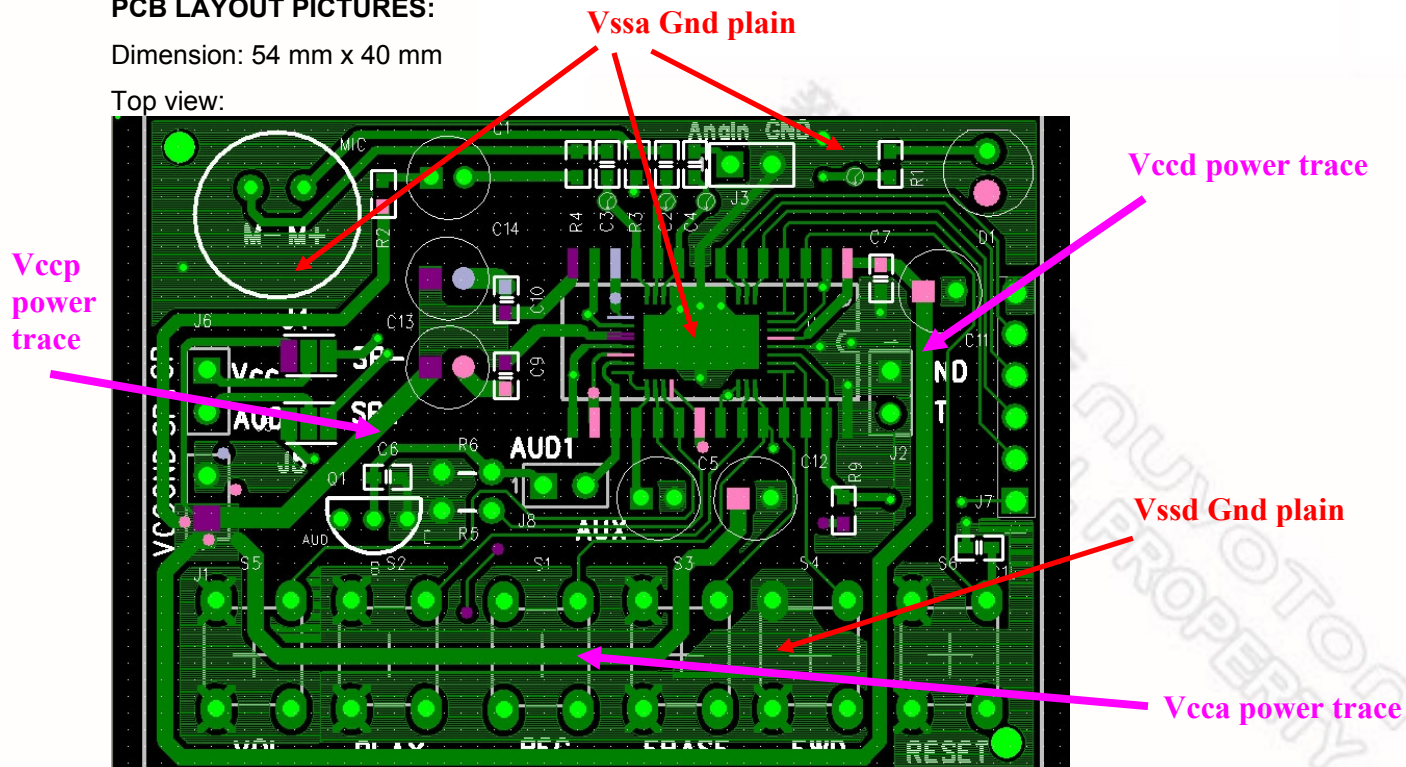
For other technical details on the ISD1700 series, please refer to the datasheet.



PCB LAYOUT PICTURES:

Dimension: 54 mm x 40 mm

Top view:



Rear view:

