

Audio

NW-AUD-ICS52000

InvenSense ICS-52000 Low Noise Microphones with TDM Digital Output



Description:

The InvenSense ICS-52000 is a digital TDM output bottom port microphone. The complete ICS-52000 solution consists of a MEMS sensor, signal conditioning, an analog-to-digital converter, decimation and anti-aliasing filters, power management, and an industry standard 24-bit TDM interface. The TDM interface allows an array of up to 16 of the ICS-52000 microphones to connect directly to digital processors, such as DSPs and microcontrollers, without the need for an audio codec in the system. All microphones in an array sample their acoustic signals synchronously, enabling precise array processing.

The ICS-52000 has a high SNR of 65 dBA and a wideband frequency response. The sensitivity tolerance of the ICS-52000 is ± 1 dB, which enables high-performance microphone arrays without the need for system calibration. The ICS-52000 is available in a small 4 mm \times 3 mm \times 1 mm surface-mount package.

The NW-AUD-IC52000 provides an easy to use, low-cost, small 1x4 microphone layout configuration. Female connectors on the left and bottom side and two male connectors on the top and right side allow for user defined tile TDM array up to 4 boards (16 microphones) together in any configuration, i.e. a 1x16 array, a 2x8 TDM arrays etc.

Additional Information:

For more information on the InvenSense ICS-52000 users can get the complete datasheet from the link below. https://www.cdiweb.com/datasheets/invensense/DS-000121%20ICS-52000%20data%20sheet%20v1%201.pdf

Features:

- User defines tile array for 4 to 16 TDM arrays
- Small board size
- Can be used with standard reference testing packages

