

## SmartSound One

Smart multi-format MEMS microphone evaluation modules

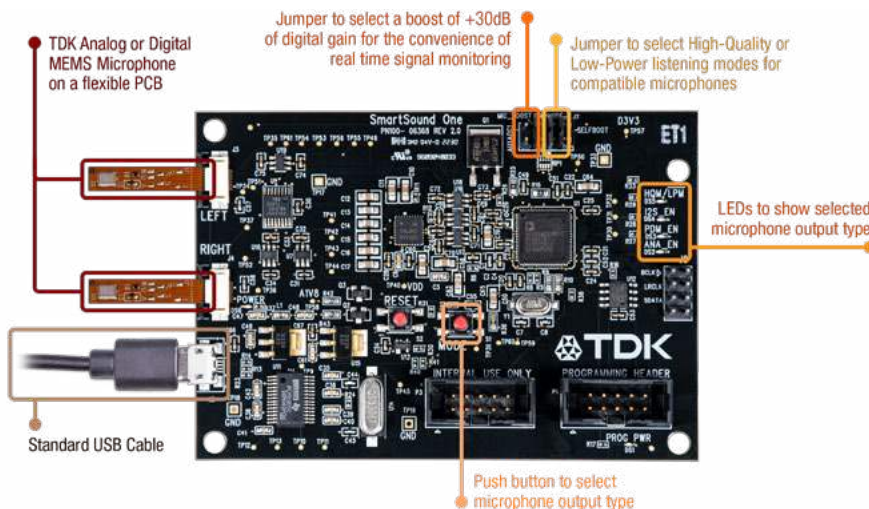
### Overview

TDK's SmartSound One (MD-54001) is an all-in-one microphone interface module that enables rapid evaluation and development of TDK MEMS microphone solutions.

Users can connect up to two edge connector Flexible Printed Circuit Boards (FPCB) and select the audio output interface to record over USB and evaluate the performance for a particular application.

### Key Features

- All-in-one microphone interface evaluation module
- Standard USB connection for data and power
- Plug-and-play functionality – no programming or soldering required
- Simple user push button interface to select common microphone output types (Analog Single-ended, Analog Differential, PDM)
- High quality stereo audio capture to any PC recording software or as a real-time microphone input



SmartSound One features an EEPROM to load the factory default DSP program on power up, making it a plug-and-play solution. There are two parallel signal processing paths for analog and digital microphones which the user can select using the 'mode' button which is routed through the DSP and the on-board USB audio codec to send audio data packets over USB.

The board also features an array of configuration jumpers to set compatible microphones in either low power or high quality listening modes, as well as a level boost of up to +30 dB of digital gain for the convenience of real time signal monitoring.

