



Product brief

IM72D128V01

IP57 dust and water resistant digital PDM XENSIV™ MEMS microphone

Product overview

Key parameters	Specifications
Environmental robustness	IP57
Sensitivity @ 1 kHz, 94 dB SPL	-36 ±1 dBFS
Signal-to-Noise Ratio (SNR)	72 dB(A)
Acoustic overload point (1/10% THD)	126/128 dB SPL
Current consumption	980 µA @ 3.072 MHz
Low frequency roll off (LFRO)	20 Hz
Group delay @ 1 kHz	7 µs
Supply voltage	1.62 to 3.60 V
Interface	Digital PDM
Port location	Bottom port
Package dimensions	4.00 x 3.00 x 1.20 mm

Key features

- > Component level IP57 water and dust resistant
- > 72 dB(A) signal-to-noise ratio
- > Acoustic Overload Point (AOP) of 128 dB SPL
- > Tight sensitivity (-36 ±1 dB) tolerance
- > 20 Hz low frequency roll-off
- > Digital PDM output
- > 980 µA current consumption

Benefits

- > Far-field and low volume audio pick-up
- > Clear audio signals even for highest sound pressure levels
- > Highest precision of audio beams and algorithms

Typical applications

- > Voice User Interface (VUI):
e.g. smart speaker, home automation, and IOT devices
- > Active Noise Cancellation (ANC):
headphones and earphones
- > High quality audio capturing:
e.g. cameras, laptop, tablet, and conference systems

Package information

