# IM66D130M

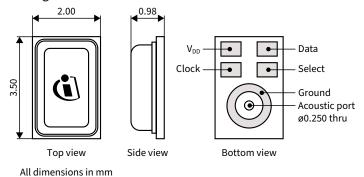
# infineon

## Ultra-low power digital PDM XENSIV™ MEMS microphone

#### **Product overview**

Key parameters	Normal mode
Enviromental robustness	IP57
Sensitivity @ 1 kHz, 94 dBSPL	-37 ± 1 dBFS (HPM/LPM)
Signal-to-noise ratio (SNR)	66 dB(A)
Current consumption	510/170 μΑ
Acoustic overload point (1/10% THD)	124/130 dBSPL
Low frequency roll-off (LFRO)	35 Hz
Supply voltage	1.62 to 3.60 V
Interface	Digital PDM
Port location	Bottom port
Package dimension	3.0 x 2.0 x 0.98 mm

#### Package information





#### www.infineon.com

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# **Key features**

- Low 510 μA current consumption in always-on mode
- Component level IP57 water and dust resistant
- 66 dB(A) Signal-to-noise ratio
- Acoustic overload point (AOP) of 130 dBSPL
- Tight sensitivity (-37/-37  $\pm$  1 dB) tolerances
- 35 Hz low frequency roll-off

### **Key benefits**

- Strong acoustic performance with small footprint and low current consumption
- Clear audio signals even for high sound pressure levels
- Performance across wide frequency range for audio beams and algorithms

#### **Typical applications**

- Active Noise Cancellation (ANC): headphones and earphones
- Smartphones and mobile devices
- Hearing enhancement devices
- Voice User Interface (VUI):
  e.g. smart speaker, home
  automation, and IOT devices
- Power constrained applications