

Time-saving embedded tools

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# **DTMF Generator Click**





#### PID: MIKROE-4298

DTMF Generator Click is a compact add-on board that generates DTMF (Dual-Tone Multi-Frequency) signals designed for MCU interfaces. This board features the HT9200A, a dual-tone multi-frequency decoder mostly used in mobile communications systems from Holtek Semiconductor Inc.. The HT9200A tone generators can be instructed by an MCU to generate 16 dual tones and 8 single tones from its DTMF pin. It provides a Serial Mode interface, has a low total harmonic distortion and features a low current in the Stand-By mode. This Click board<sup>™</sup> is suitable for various applications such as security systems, home automation, remote control through telephone lines, communication systems, and more.

DTMF Generator Click is supported by a mikroSDK compliant library, which includes functions that simplify software development. This Click board<sup>™</sup> comes as a fully tested product, ready to be used on a system equipped with the mikroBUS<sup>™</sup> socket.

Mikroe produces entire development toolchains for all major microcontroller architectures.

Committed to excellency, we are dedicated to helping engineers bring the project development up to speed and achieve outstanding results.



ISO 27001: 2013 certification of informational security management system. ISO 14001: 2015 certification of environmental management system. OHSAS 18001: 2008 certification of occupational health and safety management system.



ISO 9001: 2015 certification of quality management system (QMS).



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## Specifications

Туре	Signal Processing
Applications	Can be used for various applications such as security systems, home automation, remote control through telephone lines, communication systems, and more.
On-board modules	DTMF Generator Click is based on the HT9200A, a dual-tone multi-frequency decoder designed for mobile communication systems from Holtek Semiconductor Inc
Key Features	Dual-tone multi-frequency decoder, serial mode, low stand-by current, low total harmonic distortion, and more.
Interface	GPIO
ClickID	No
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V or 5V

### Resources

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board<sup>™</sup> Catalog

Click boards<sup>™</sup>

### **Downloads**

DTMF Generator click 2D and 3D files

LM386 datasheet

DTMF Generator click example on Libstock

DTMF Generator click schematic

HT9200A datasheet

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