

# **WM9010**

# Low Power Class G Stereo Headphone Amplifier

# LOW COST HEADPHONE AMPLIFIER IN A SMALL PACKAGE THAT DELIVERS AN OUTSTANDING LISTENING EXPERIENCE FOR PORTABLE AUDIO DEVICES.

WM9010 is a low power, capless Class G stereo headphone amplifier designed for portable audio applications powered from a single 1.8V supply and is available in a 12-ball 1.8 x 1.3mm CSP package.

WM9010 extends playback time beyond that delivered by other Class G headphone amps thanks to an input signal envelope detector which enhances efficiency by tracking the signal level and dynamically adjusting the headphone amplifier power supply circuitry, as well as offering exceptionally low quiescent power consumption.

The listening experience is further enhanced through Wolfson's SilentSwitch™ technology which ensures pop free enable and disable of the headphone outputs.

#### TARGET APPLICATIONS



Mobile handsets

Portable media players

Mobile computing devices

Security systems

Bluetooth car kits

Handheld gaming devices

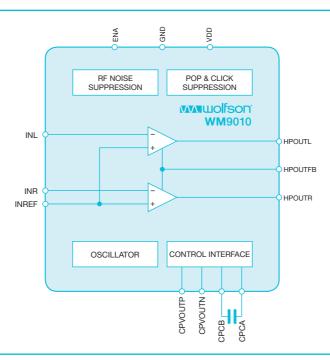
Portable well-being solutions

### **PRODUCT BENEFITS**

Minimal PCB footprint for small, slim product designs – small CSP package and capless outputs

Extends playback time through dynamic Class G headphone amp for optimal power consumption

Hi-fi quality listening experience – 104dB SNR



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#### **PRODUCT FEATURES**

Hi-fi quality stereo outputs - 104dB SNR

28mW of output power into  $32\Omega$ , 1% THD+N

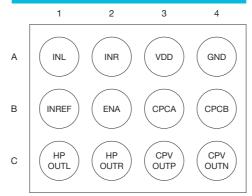
SilentSwitch™ pop free output enable and disable

Single 1.8V supply

Hardware enable pin

12-ball 1.8 x 1.3mm CSP package

# WM9010 BALL CONFIGURATION

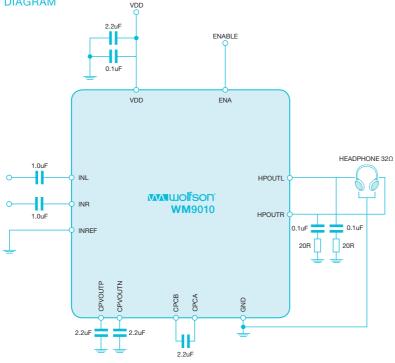


12-BALL CSP PACKAGE (TOP VIEW)

# **ORDER INFORMATION** ORDER CODE WM9010ECS/R 9010 FULL SYSTEM BOARD WM9010-6244-CS12-EV1 TEMPERATURE RANGE -40°C TO +85°C 12-BALL CSP, 0.5 PITCH PACKAGE (Pb free, tape and reel) MOISTURE MSL 1 SENSITIVITY LEVEL

260°C

## WM9010 RECOMMENDED EXTERNAL **COMPONENTS DIAGRAM**



# **TOOLS AND SUPPORT**

PEAK SOLDERING

TEMPERATURE

For the full suite of documentation please visit: www.wolfsonmicro.com/products/audio\_amplifiers

Wolfson GUI development environment WISCE: www.wolfsonmicro.com/support/wisce



#### CONTACT DETAILS www.wolfsonmicro.com

For more information please visit www.wolfsonmicro.com

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