

### Compact 22V<sub>PP</sub>/31V<sub>PP</sub> Selectable Output Piezo Sounder Driver with Automatic Shutdown Drives Higher SPL

The PAM8907 is a piezoelectric sounder driver with a built-in boost converter capable of driving a ceramic/piezo sounder with up to 31V<sub>PP</sub> output.

With its integrated boost converter, the PAM8907 provides an optimized solution with higher Sound Pressure Level (SPL) for louder output sound. Its low quiescent current, along with an automatic turn-on/off feature, helps to extend battery runtime, making it a perfect solution for trackers and other battery-powered devices.

The PAM8907's boost converter switches at 1.8MHz using a small 1µH inductor with minimal external components, making the total solution extremely compact. Its output voltage is selectable between 11V and 15.6V, providing flexibility to designers.

Protection features include overtemperature protection, overcurrent protection, overvoltage protection, and undervoltage-lockout protection.

The PAM8907 is available in the small U-QFN2020-10 package.



#### The Diodes Advantage

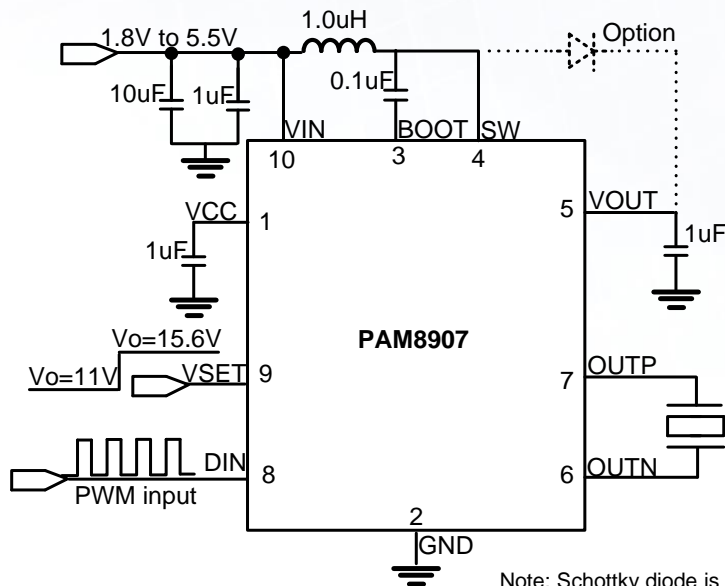
- **22V<sub>PP</sub>/31V<sub>PP</sub> output across the whole input supply range**  
Two selectable Sound Pressure Level (SPL) values provide high flexibility to serve a broad range of applications
- **Wide input supply voltage range from 1.8V to 5.5V**  
Supports 2-NiMH cells and 1-Li-Ion cell-powered applications, as well as 3.3V and 5V rail-powered applications
- **Integrated boost converter**  
Provides stable piezo sounder output even as the battery discharges
- **Low Inrush current, low EMI**  
Helps system robustness
- **Automatic shutdown and wake-up control**  
Extends battery runtime
- **Small U-QFN2020-12 package and tiny 1µH inductor**  
Delivers a compact PCB footprint

#### Applications

- Health Care Systems
- Alarm Clocks
- IOT-Bluetooth® Trackers
- Security Devices
- Home Appliances
- Smoke Alarms

*Bluetooth® is a registered trademark of Bluetooth SIG.*

### Typical Application Schematic



Note: Schottky diode is optional. If added, it can save 20% in power consumption.

### Ceramic/Piezo Sounder Driver Portfolio

Product	Description	$V_{IN}$ (V)	$I_Q$ ( $\mu$ A)	$V_{OUT}$ (V)	Package
<a href="#">PAM8904E</a>	27Vpp output Charge pump	1.5-5.5	<1	X1/X2/X3 Charge pump	U-QFN3030-16 U-QFN3030-12 W-QFN2020-12
<a href="#">PAM8907</a>	22/31Vpp output Inductive Boost	1.8-5.5	<1	11/15.6V	U-QFN2020-10

### Ordering Information

Part Number	Compliance	Package code	Package	Moisture Sensitivity	7" Tape and Reel	
					Quantity	Reel suffix
PAM8907SB10-7	Standard	SB10	U-QFN2020-10	MSL1	3,000	-7