



## New Product Announcement

### PAM8106

## High-Performance 10W Stereo Class-D Audio Amplifier

PAM8106 is a 10W per channel, stereo class-D audio amplifier offering low THD+N, low EMI, and high PSRR performance for high-quality sound reproduction.

The 4.5V to 15V supply gives efficiency up to 92% to eliminate heat-sinking. Built-in Spread Spectrum Modulation (SSM) technology enables it to use inexpensive ferrite beads as output filters whilst meeting EMC requirements for system cost reduction.

PAM8106 integrates Non-Clipping Power Limit (NCPL) to automatically suppress output signal clipping which helps maintain low THD+N and protects the speakers from damage.

PAM8106 offers full protection against short circuit and thermal shutdown as well as undervoltage and DC input protection.



### The Diodes' Advantage

**PAM8106 provides a simple, low-EMC solution for medium-power audio-amplifier applications.**

- **Supports 4Ω Load-driving Capability**  
Maximizes power output capability at low voltage rails
- **4.5V to 15V Supply Voltage**  
Supports a wide range of power rails
- **High SNR 90dB, High PSRR 70dB, Up to 92% Efficiency**  
High audio performance system
- **Built-In Non-Clipping Power Limit (NCPL) with SSM Feature**  
Maximizes audio performance whilst protecting the system
- **Short-Circuit, UVLO Thermal & DC Input Protection**
- **W-QFN5050-32 (Standard) package**

### Applications

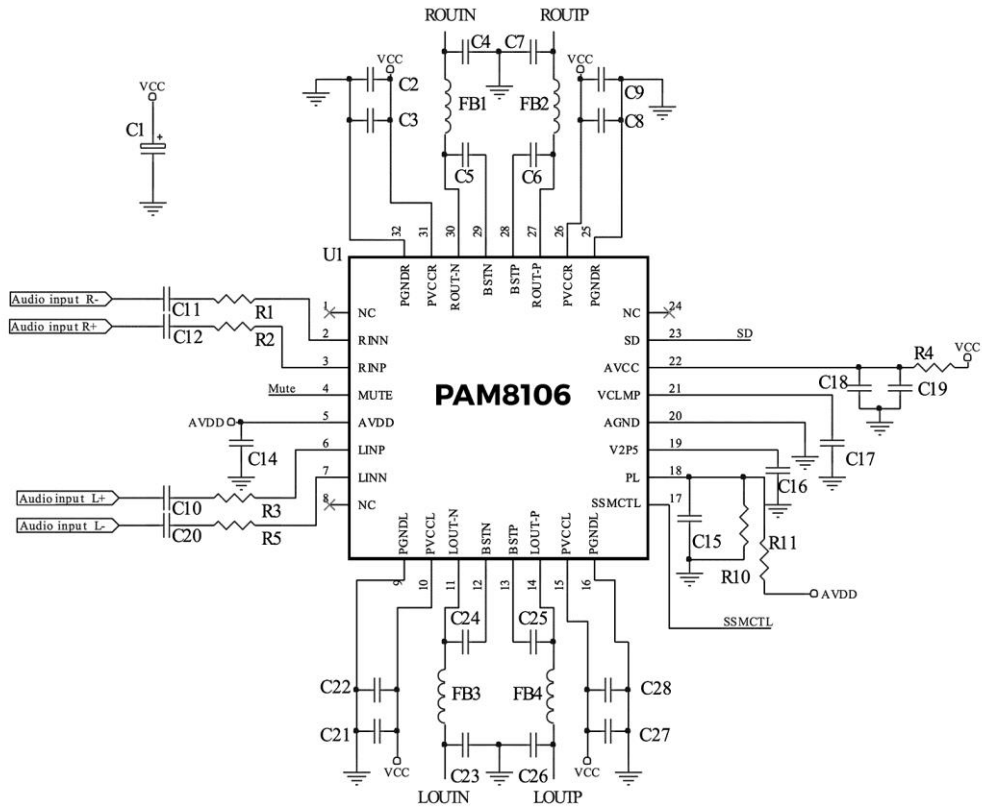
- Consumer Audio Equipment
  - LCD Monitor / TV
  - Home Sound System
  - DVD Players
- Other Audio Equipment
  - Game Machines
  - Docking Stations
  - Music Instruments
- Portable Audio
  - Boom Box
  - Bluetooth Speakers



# New Product Announcement

## PAM8106

### Typical Application



## Diodes Medium Power Class-D Audio Amplifier

Product	Description	Vin (V)	IO (mA)	Efficiency	Gain (dB)	SNR (dB)	PSRR (dB)	Package
PAM8006A	2x15W with Power Limit	10 – 26	20	90%	32	90	65	W-QFN5050-32 (Standard)
PAM8106	2x10W with NCPL & SSM	4.5 – 15	20	92%	32	90	70	W-QFN5050-32 (Standard)
PAM8124	2x15W with SE output	10 - 26	25	95%	20 /26 /32 /36	92	52	TSSOP-24EP
PAM8320	Mono 20W Amplifier	4.5 - 15	15	95%	20	95	60	SO-16EP
PAM8610	2x10W with DC Vol. control	7 - 15	20	90%	-107	95	60	QFN6060-60

## Ordering Information

Device	Packaging	Package Marking Info	Shipping & Package
PAM8106TVR	W-QFN5050-32 (Standard)	PAM8106 XXXXYWWLL	2,500 Tape & Reel