

CN3333

Three-Channel 6th-Order High Definition Video Filter Driver

Features

- Triple 6th-order 35MHz HD filters
- Drive Single or Dual Video Load
- 6dB Output Driver Gain
- Transparent Input Clamping
- AC or DC Coupled Inputs
- AC or DC Coupled Outputs
- Operates from 3.3V to 5.5V

Applications

- Cable set-top boxes
- Satellite set-top boxes
- DVD Players
- Personal Video Recorders
- Communications Devices
- Video on Demand

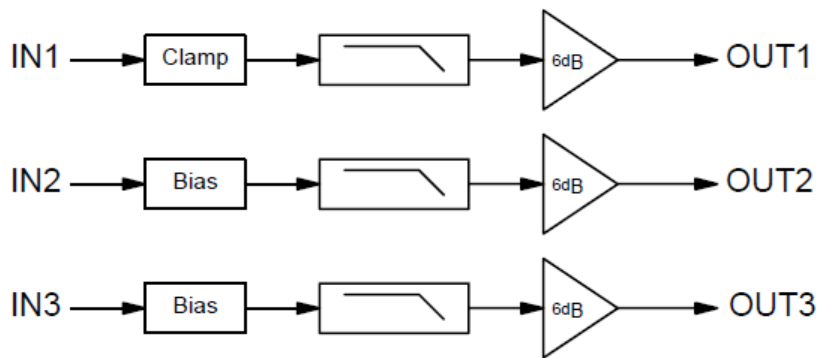
Description

The CN3333 low voltage, triple video filter is intended to replace passive LC filter and drivers with a low-cost integrated device. The 6th order filter provides much improved image quality compared to typical 2nd or 3rd order passive LC filters. The filters are especially suited for high definition video signals, such as television and set-top box applications.

The CN3333 can be directly driven by a DC coupled DAC output or an AC coupled signal. Internal diode clamps and bias circuitry may be used if AC-coupled inputs are required.

The output can drive AC or DC coupled single (150 Ω) or dual (75 Ω) loads. DC coupling the outputs removes the need for output coupling capacitors. The input DC levels are offset approximately 350 mV at the output.

Functional Block

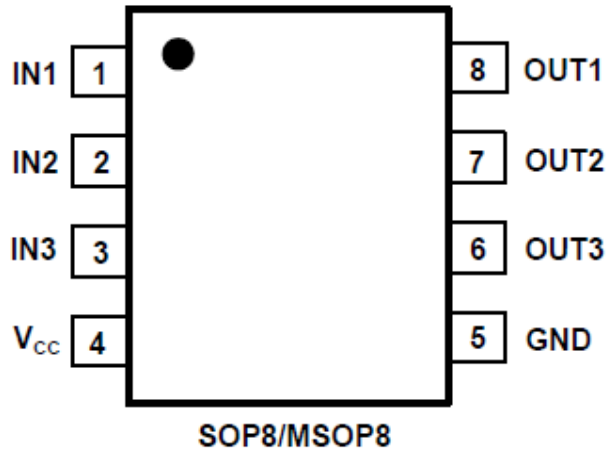


CN3313

Ordering Information

| Order Part Number | Top Marking | Pb-Free | T _A | Package | |
|-------------------|-------------|---------|----------------|---------|-------------------|
| CN3333SO8 | | Yes | -40 to +125°C | SOIC8 | Tape & Reel, 3000 |
| CN3333MP8 | | Yes | -40 to +125°C | MSOP8 | Tape & Reel, 3000 |

Pin Configuration



Pin Description

| Pin Name | Pin Number | Description |
|----------|------------|--------------------------|
| IN1 | 1 | Video input, Channel 1 |
| IN2 | 2 | Video input, Channel 2 |
| IN3 | 3 | Video input, Channel 3 |
| VCC | 4 | Power Supply |
| GND | 5 | Ground |
| OUT3 | 6 | Filter output, channel 3 |
| OUT2 | 7 | Filter output, channel 2 |
| OUT1 | 8 | Filter output, channel 1 |