
Subject: New power amp IC's as AudioExpress
Posted by [Chris R](#) on Fri, 25 Mar 2005 23:07:05 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Folks, AudioExpress is now offering LM3886 IC's. These are fairly high power op-amps (40W-60W). I'm writing just to relate my experience building one of these things. For the price of the IC, a transformer, PS capacitors, and a heat sink, you can build what seems to be a rather useful power amp. The specs are nice if you like solid state, and it takes just a few components to get it working. National has a good datasheet on their web site with schematics. The one I built uses a 20V-20V xfmr and makes about 40W. AE has a selection of toroid xfms that should work nicely. Chris

Subject: Re: New power amp IC's as AudioExpress
Posted by [GarMan](#) on Sat, 26 Mar 2005 01:54:21 GMT
[View Forum Message](#) <> [Reply to Message](#)

Chris, you're talking about a gainclone, right?

Subject: Re: New power amp IC's as AudioExpress
Posted by [Chris R.](#) on Sat, 26 Mar 2005 18:32:45 GMT
[View Forum Message](#) <> [Reply to Message](#)

This isn't about gainclone. It's the LM3886 power opamp ICs. If I'm counting right, it takes 2 small caps and 4 resistors plus the power supply stuff and heatsink to make a lot of clean, quiet power. Check the datasheet at www.national.com. Chris

Subject: Re: New power amp IC's as AudioExpress
Posted by [ToFo](#) on Sat, 26 Mar 2005 20:42:31 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi, I hope I am not losing it, but I couldn't find it at AudioExpress (auto sound) or AudioXpress (magazine). Can I have a link? I did manage to locate them for 5 bucks at Part Express. (link below) Pretty cool, might have to make a few. (preparing to active multiamp again) Thomas
LM3886 @ parts express

Subject: Re: New power amp IC's as AudioExpress
Posted by [steve f](#) on Sun, 27 Mar 2005 00:24:09 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Cris,How about sharing the design either here or on the class a / chip forum?Take care,Steve

Subject: Re: New power amp IC's as AudioExpress
Posted by [GarMan](#) on Sun, 27 Mar 2005 00:49:54 GMT
[View Forum Message](#) <> [Reply to Message](#)

Marchand Electronics has a power module kit based on the 3886. User manual and design can be downloaded on his site. A few more parts because it was designed to accomodate balanced and single ended input.
<http://www.marchandelec.com/pm21.html>

Subject: Re: New power amp IC's as AudioExpress
Posted by [ToFo](#) on Sun, 27 Mar 2005 07:33:38 GMT
[View Forum Message](#) <> [Reply to Message](#)

Thanks GarMan,You nailed it! I was wondering if I could find a simple chip kit with balanced inputs to accomodate my crossover. The bridging might come in handy for big woofers too. Thanks a bunch!Thomas

Subject: Re: New power amp IC's as PartsExpress
Posted by [Chris R](#) on Sun, 27 Mar 2005 16:32:03 GMT
[View Forum Message](#) <> [Reply to Message](#)

Sorry folks! The parts are at PartsExpress as noted inthe other followups below.Chris

Subject: Re: New power amp IC's as AudioExpress
Posted by [Chris R](#) on Sun, 27 Mar 2005 17:06:49 GMT
[View Forum Message](#) <> [Reply to Message](#)

I took a look over there, and the design and schematics are more or less the same as the other chips being discussed. I suspect that National sells the same chips that meet different specs as different device numbers, but internally, all are the same. Chris

Subject: Re: New power amp IC's as AudioExpress
Posted by [GarMan](#) on Tue, 29 Mar 2005 19:36:40 GMT
[View Forum Message](#) <> [Reply to Message](#)

Thomas, if you've never seen one, Phil Marchand's PCBs are a work of art. Double-sided, teflon coated, trace lines through the solder holes, and board is thick. Ever get a hold of something so high quality, you can't put it down? Maybe it's the engineer in me, but when I received my PM224 boards, I spent a whole evening admiring it. The heatsink bracket and heatsink were perfectly machined too.
