Subject: New power amp IC's as AudioExpress
Posted by Chris R on Fri, 25 Mar 2005 23:07:05 GMT
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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 experiencebuilding one of these things. For the price of the IC, a transformer, PS capacitors, and a heat sink, you can build whatseems to be a rather uesfull power amp. The specs are nice if youlike solid state, and it takes just a few components to get itworking. National has a good datasheet on their web site with schematics. The one I built uses a 20V-20V xfmr and makes about40W. AE has a seletion of toriod xfmrs 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
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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
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This isn't about gainclone. Its the LM3886 power opamp ICs. If I'mcounting right, it takes 2 small caps and 4 resistors plus the powersupply 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
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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
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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
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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
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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
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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
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I took a look over there, and the design and schematics aremore or less them same as the other chips being discussed.I suspect that National sells the same chips that meet differentspecs as different device numbers, but internally, all are the same.Chris

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Subject: Re: New power amp IC's as AudioExpress
Posted by GarMan on Tue, 29 Mar 2005 19:36:40 GMT
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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.
