

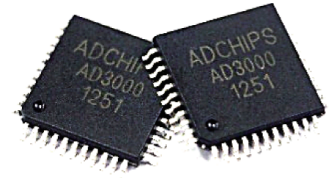
AD3000

Voice IC with Digital Amplifier & Flash Memory



Description

AD3000 series is a low-power voice IC which has Digital amplifier and enable to drive 6~16ohm speaker directly. It has the decoder of PCM and ADPCM that provides variety of bit rates. AD3000 series can be used stand-alone mode or u-com mode. AD3000 series has a non flash memory version and an embedded flash memory version. And all of them can use an external SPI Flash for sound data



Features

- 16bits operation in ADPCM Decoder
- Stand-alone mode / SPI Interface mode
- Program Play : Selectable Phrase play / Sentence play
- Direct Play : PCM / ADPCM input
- Internal Flash Memory(Optional) : 8Mbits (AD3008)
- Non-Encoded data can be saved in the internal/external flash memory for high quality
- Direct internal/external serial flash memory access
- Direct speaker drive with internal digital amplifier
 - 600mW @ 8ohm, THD=10% (VCC=3.3V)
 - 1.5W @ 8ohm, THD=10% (VCC=5.5V)
- X-tal oscillator or Passive ring oscillator : Master clock frequency is 16.384 or 32.768MHz
- Maximum 36 keys(matrix structure) at stand-alone mode
- Auto power save mode for low power consumption
- Sampling rate : 4, 8, 16KHz / 8, 16, 32KHz(X-tal : 16.384MHz / 32.768MHz)
- Maximum play time (@ internal 8Mb flash, 4KHz sampling rate) : 500sec
- Two low dropout LDOs for internal/external flash or u-com
- POR
- Auto stand-by : under 0.1uA when no key input
- Supply Voltage : 2.8V ~ 5.5V
- Package : 44QFP

Application Area

- Home Appliance
- Audiobook
- GPS/Navigation
- Announcement Device
- Toy
- Door Lock

Advanced Digital Chips Inc.

Korea (Headquarters)

22F, Bldg A, Keumkang Penterium IT Tower, 810 Gwanyang-dong,
Dongan-gu, Anyang-si, Gyeonggi-do, 431-060, Korea
T : +82-31-463-7500 / F : +82-31-463-7588
<http://www.adc.co.kr> / E-mail : eisc@adc.co.kr

China

Peak Microtech Co., Ltd

北京芯首电子科技有限公司
E-mail : sales@peaktech.com.cn
<http://www.peaktech.com.cn>