



5.1-Channel Dolby Digital DECODER

NJU25301

DATA SHEET

■ GENERAL DESCRIPTION

The **NJU25301** is a complete 5.1-channel decoder intended for use in Dolby Digital consumer applications.

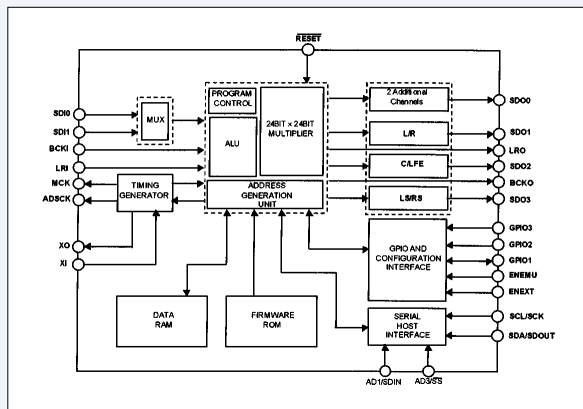
NJU25301 contains on-chip firmware for decoding and processing of up to 5.1 channel Dolby Digital bit streams, and linear PCM data. The **NJU25301** complies with Bass Management System is offered by Dolby Lab.

The **NJU25301** is suitable for performance driven applications such as AV receiver and HDTV.

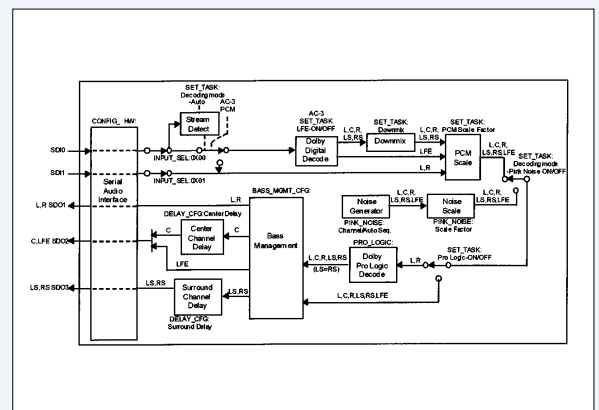
■ FEATURES

- Operating Voltage : 5V
- Complete Class A Dolby Digital Decoder
- Supports 16, 18, 20, or 24-bit Resolution
- Audio Sample Rate : 32kHz, 44.1kHz, 48kHz
- Down Mix Modes : 1, 2, 3, or 4 channels
- On-chip Program ROM :
 - Dolby Digital Decoding
 - Dolby Pro Logic Decoding
 - Surround and Center Channel Delays
 - Pink Noise Generator
 - Bass Management
- 3-wire Serial Data or I²C BUS Interface
- C-MOS Technology
- Package Outline QFP 80

■ BLOCK DIAGRAM



■ FUNCTION BLOCK DIAGRAM



Powerful Bass Management

BASS MANAGEMENT

The standard Dolby Digital speaker system is consisted of L, R, C, LS, RS and Subwoofer. The SW has much lower bandwidth than the other five speakers, and it generates lower range sound. But for some systems, it is often that one or more of the main five speakers is capable of truly low frequency response. In such cases, it may not be necessary to have Subwoofer, or it may be better to process the lower frequencies to these wide-range speakers except Subwoofer. Therefore, the Dolby Digital speaker system requires to be optimized to each user's system.

The Bass Management System optimizes the Dolby Digital speaker system.

