

MD/CD

Digital Signal Processor

CXD2657R

Description

The CXD2657R is a playback-only LSI that performs digital signal processing of MiniDisc and compact disc with a single chip. It is equipped with 1-bit DAC and secondary LPF. This LSI is designed to be used in combination with the CXA2523AR.

Features

- MD signal processing + CD signal processing + CD shock resistant memory controller + DAC + LPF are integrated on a single chip.
- A single 4/6M DRAM is shared between MD and CD.
- CD TEXT data demodulation
- Digital Out supporting 16/20 bits
- Master clock
512 fs (22.5792 MHz)
- ATRAC decoder
Adopting block floating
- Built-in DAC
Equipped with 8× oversampling digital filter, third-order 1-bit DAC, and secondary analog low-pass filter. Not only audio data from ATRAC decoder but external audio data (Pin 34 DATA1 pin) can be used for built-in DAC.
* Input word length: 16/20 bits
* Functions: Digital attenuation (−∞, −60 to +6 dB)
Digital de-emphasis
Digital dynamic bass boost/treble boost (turnover frequency can independently be selected.)
Digital dynamics (compressor)
Zero data detection independently for L ch and R ch

Applications

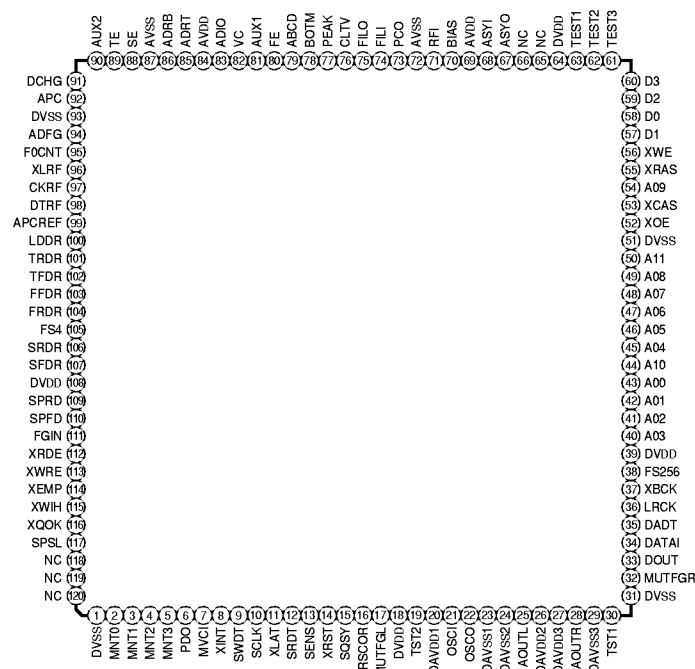
MiniDisc/compact disc players

Recommended Operating Conditions

- | | | | |
|-------------------------|-----------------|------------|----|
| • Supply voltage | V _{DD} | 3.0 to 3.6 | V |
| • Operating temperature | Topr | −10 to +75 | °C |

Block Diagram

(120-pin LQFP)



Sony reserves the right to change products and specifications without prior notice.

This information does not convey any license by any implication or otherwise under any patents or other right.