

CXD1196R

CD-ROM Decoder

Description

The CXD1196R is a CD-ROM decoder LSI with a built-in ADPCM decoder.

Features

- CD-ROM, CD-I, CD-ROM XA format compatible
- Real time error correction
- Double speed reproduction compatible (when $V_{DD}=5.0\pm10\%$)
- Can be connected to a standard SRAM up to 32Kbytes (256 Kbits)
- All audio output sampling frequency of 132.3kHz (Built-in oversampling filter)
- Built-in de-emphasis digital filter
- Capable of V_{DD} 3.5V operation



80pin VQFP (Plastic)

Application

CD-ROM drive

Structure

Silicon gate CMOS IC

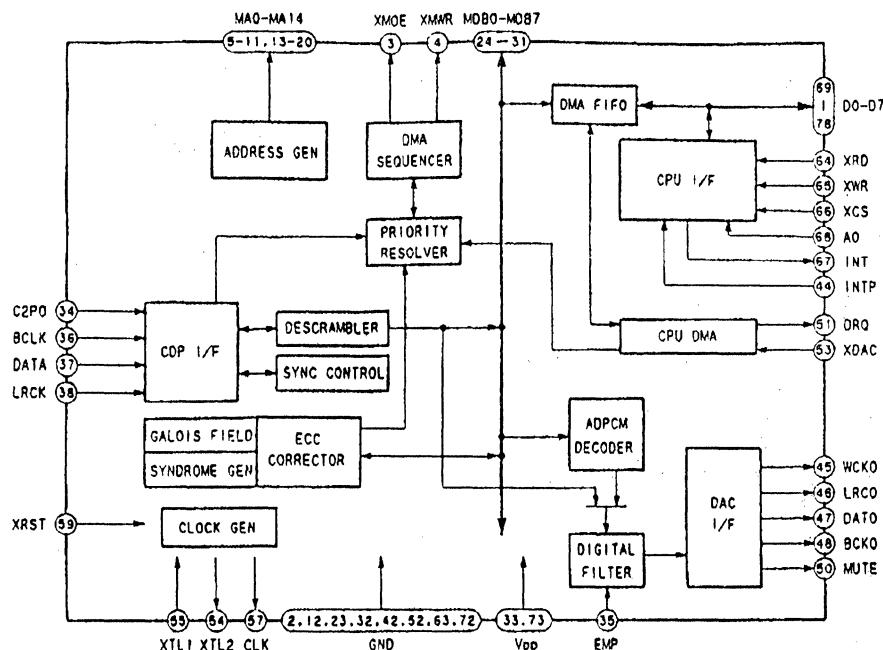
Absolute Maximum Ratings ($T_a=25\text{ }^{\circ}\text{C}$)

| | | | | |
|-------------------------|-----------|----------|----------------------|--------------------|
| • Supply voltage | V_{DD} | V_{SS} | -0.5 to +7.0 | V |
| • Input voltage | V_I | V_{SS} | -0.5 to $V_{DD}+0.5$ | V |
| • Output voltage | V_O | V_{SS} | -0.5 to $V_{DD}+0.5$ | V |
| • Operating temperature | T_{opr} | | -20 to +75 | $^{\circ}\text{C}$ |
| • Storage temperature | T_{stg} | | -55 to +150 | $^{\circ}\text{C}$ |

Recommended Operating Conditions

| | | | |
|-------------------------|-----------|--------------------------|--------------------|
| • Supply voltage | V_{DD} | +3.5 to +5.5 (+5.0 Typ.) | V |
| • Operating temperature | T_{opr} | -20 to +75 | $^{\circ}\text{C}$ |

Block Diagram



Pin Description

| No. | Symbol | I/O | Description |
|-----|--------|-----|---|
| 1 | TD7 | I/O | Test pin |
| 2 | GND | --- | Ground pin |
| 3 | XMOE | O | Buffer memory output enable negative logic signal |
| 4 | XMWR | O | Buffer memory write enable negative logic signal |
| 5 | MA0 | O | Buffer memory address (LSB) |
| 6 | MA1 | O | Buffer memory address |
| 7 | MA2 | O | Buffer memory address |
| 8 | MA3 | O | Buffer memory address |
| 9 | MA4 | O | Buffer memory address |
| 10 | MA5 | O | Buffer memory address |
| 11 | MA6 | O | Buffer memory address |
| 12 | GND | --- | Ground pin |
| 13 | MA7 | O | Buffer memory address |
| 14 | MA8 | O | Buffer memory address |
| 15 | MA9 | O | Buffer memory address |
| 16 | MA10 | O | Buffer memory address |
| 17 | MA11 | O | Buffer memory address |
| 18 | MA12 | O | Buffer memory address |
| 19 | MA13 | O | Buffer memory address |
| 20 | MA14 | O | Buffer memory address (MSB) |