



Data Sheet

Audio DSPs DAE-6 ADV TECHNOLOGY PWM CNTRLR

Manufacturers

Renesas Technology Corp

Package/Case

QFP100

Product Type

Audio ICs

RoHS

Rohs

Lifecycle

Images are for reference only

Please submit RFQ for D2-71583-LR or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The D2-6 family (D2-71083, D2-74083, D2-74583, D2-74583, and D2-74383) digital audio processor devices are complete System-on Chip (SoC) audio processor and Class-D amplifier controllers. Integrated DSP processing and configurable audio processing algorithms provide an extremely flexible platform for feature rich and cost-effective quality audio solutions which benefit from the addition of Class-D amplifiers and DSP audio processing, meeting demands of consumer electronics applications.

The 12 integrated digital PWM controllers can be used in a variety of multi-channel audio system configurations, supporting powered as well as line outputs. Fully protected amplifier control provides efficient and clean Class-D power output support.

The D2-6 device family supports full audio decoding for formats including Dolby® Digital, Dolby® Pro Logic IIx, AAC LCTM, DTS® Digital Surround, and Dolby® Digital Plus. The D2-6 family is pin-compatible and function/feature compatible with the D2-3 family devices, enabling additional decoding capability to existing designs, or providing cost optimization to lower-featured systems not requiring the additional audio processing and decode capability.

Features

Pin compatible and function/feature compatible with the D2 Audio DSP D2-3 family device

All digital Class-D amplifier controller

Full 5.1/7.1/9.1-channel amplifier platform support

Enhanced audio processing decoders

D2 Audio DSP sound enhancement algorithm and virtualization

Expanded on-chip memory capacity

12 channels of Digital Signal Processing (DSP) including equalizers, filters, mixers and other common audio processing blocks

Fully configurable and routable audio signal paths

Flexible audio input and output configurations

Embedded 8-channel sample rate converter; Sample rates from 32kHz up to 192kHz

Supports bridged, half-bridged, and Bridge-Tied Load (BTL) topologies, using discrete or integrated power stages from 10W to over 500W

Complete fault protection with automatic recovery

Related Products



D2-74583-LR

Renesas Technology Corp

TQFP128





Renesas Technology Corp

QFN

D2-92633-LR



Renesas Technology Corp

TQFP-128



D2-71083-LR

Renesas Technology Corp

128-LQFP



D2-92634-LR

Renesas Technology Corp

LQFP-128



D2-92683-QR-T

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72-QFN



D2-74083-LR

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128-LQFP



D2-41151-QR-TK

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48-QFN