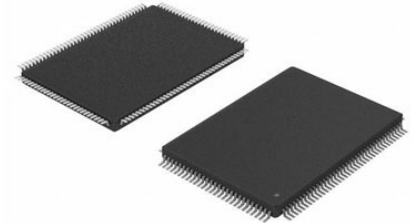


DAE-3 Advanced Technology PWM Controller for Multimedia / Do HT SUSAs
 CODE:8542330000

Manufacturers	Renesas Technology Corp
Package/Case	LQFP-128
Product Type	Audio ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for D2-92634-LR or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The D2-3(S) family (D2-92633-LR, D2-92634-LR, D2-92643-LR, D2-92683-QR, D2-92684-QR) of the D2-3 and D2-3S Digital Audio Processor devices are complete System on Chip (SoC) multi-channel digital sound processors and Class-D amplifier controllers.

The integrated DSP provides efficient and configurable audio signal path processing including equalization, dynamic range compression, mixing, and filtering that is completely configurable using the D2 Audio Customization GUI v3 high level programming interface. The integrated PWM engine supports programmable and dynamic control of audio output, enabling a variety of multi-channel output configurations and output power capacity. Internal noise shaping, an embedded asynchronous sample rate converter, dynamic level-dependent timing, and high resolution operation support power stage audio performances with SNR >110dB and THD+N <0.01%.

The D2-3(S) devices are provided in two package and feature configurations which include the 128 Ld D2-3 family and the 72-pin D2-3S family. Both the D2-3 and D2-3S family provide identical performance and enable an extremely flexible platform for feature rich and cost-affordable quality audio solutions, which benefit from the addition of Class-D amplifiers and DSP audio processing.

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.

Features

D2-3 family pin compatible and function/feature compatible with the D2 Audio DSP D2-6 device family

D2-3S family - identical D2-3 family performance, in a 72 Ld QFN package

Customizable audio path sound processing

Fully configurable and routable audio signal paths and hardware function assignment

Fully supported with the D2 Audio Customization GUI v3 Design Tool

12 independent PWM engine channels

Four independent asynchronous I2S digital inputs

Integrated high-performance stereo ADC (D2-3 family only)

S/PDIF™ digital audio inputs supporting linear IEC-61958 PCM or compressed IEC-61937 audio

S/PDIF digital audio PCM output

Supports bridged, half-bridged, and Bridge-Tied Load (BTL) topologies, using discrete or integrated power stages

Complete fault protection with automatic recovery

D2 Audio DSP Sound Enhancement Algorithms and virtualization

Enhanced audio processing decoders and virtualization

Related Products



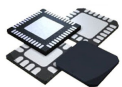
[D2-74583-LR](#)

Renesas Technology Corp
TQFP128



[D2-71583-LR](#)

Renesas Technology Corp
QFP100



[D2-92684-QR-T](#)

Renesas Technology Corp
QFN



[D2-92683-QR-T](#)

Renesas Technology Corp
72-QFN



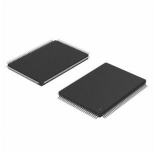
[D2-92633-LR](#)

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TQFP-128



[D2-74083-LR](#)

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128-LQFP



[D2-71083-LR](#)

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128-LQFP



[D2-41151-QR-TK](#)

Renesas Technology Corp

48-QFN