



Semiconductors

Audio Dataconversion ICs

PHILIPS

Audio Dataconversion ICs

Digital to Analog converters (DACs)

Type	Type-number	Description	Typ. Supply Volt.	No. of channels	Data Formats	Typical THD+N at 0dB (dB)	Typical S/N (dB)	System-clock	Input	Output (V)	Encapsulation	Power Supply (V)	Sound features	Power dissipation (mW)	Operating temperature range (°C ¹⁾)	De-emphasis (kHz)
6 CHANNEL DAC	UDA1328T	Multi-channel filter DAC	diff. Mode	6	I ² S, MSB-justified, 16,18, 20, 24 bits format compatible, 1f _s input format	-95	106	256f _s , 384f _s , 512f _s , 768f _s		2.0	SO32	2.7 to 3.6	5 to 100kHz SRF. Control via L3mode or static pin control. Dig. Vol. Control, dig. Sil. Detection, mute	129	-40 to +85	32, 44.1, 48 and 96
			s/e mode			-90	103			1.0						
STEREO DAC	UDA1330ATS	Low-cost stereo filter DAC	5V	2	I ² S, MSB justified, LSB justified 16, 18 and 20 bits format compatible, 1f _s input format	-90	100	256f _s , 384f _s , 512f _s		1.45	SSOP16	2.7 to 5.5	8 to 55kHz SRF. Control via L3 mode or static pin control dig. volume control, mute, TTL tolerant input pads	75	-40 to +85	32, 44.1 and 48
			3V			-85	100			1			33			
STEREO DAC	UDA1334TS	Low power audio DAC	3V	2	I ² S, LSB-justified 16, 20 and 24 bits format compatible, 1f _s input format	-90	100	Automatic systemclock versus sample rate detection		0.75	SSOP16	1.8 to 3.6	8 to 100 kHz SRF.	17.0	-40 to +85	44.1
			2V			-80	97			0.5				7.0		
STEREO DAC	UDA1334ATS	Low power audio DAC including PLL	audio mode	2	I ² S, LSB-justified 16, 20 and 24 bits format compatible, 1f _s input format	-90	100	Automatic systemclock versus sample rate detection		0.9	SSOP16	2.4 to 3.6	16 to 100 kHz SRF.	18	-40 to +85	44.1
			video mode											24		
STEREO DAC	UDA1334BTS	Low power audio DAC	3V	2	I ² S, LSB-justified 16, 20 and 24 bits format compatible, 1f _s input format	-90	100	128f _s , 192f _s , 256f _s , 384f _s , 512f _s , 768f _s		0.9	SSOP16	1.8 to 3.6	8 to 100 kHz SRF.	17.0	-40 to +85	44.1
			2V			-80	97			0.6				7.4		
STEREO DAC	UDA1334BT	Low power audio DAC	3V	2	I ² S, LSB-justified 16, 20 and 24 bits format compatible, 1f _s input format	-90	100	128f _s , 192f _s , 256f _s , 384f _s , 512f _s , 768f _s		0.9	SO16	1.8 to 3.6	8 to 100 kHz SRF.	17.0	-40 to +85	44.1
			2V			-80	97			0.6				7.4		
STEREO DAC	UDA1350AH	IEC958 audio DAC	3V	2	IEC958, I ² S	-90	100	256f _s out		0.9	QFP44	2.7 to 3.6	Control via static pin or L3; 28 to 100kHz SRF; 5V tolerant inputs; output polarity control, volume control, tone control, lock pin	80	-40 to +85	Automatic selected 32, 44.1 and 48
STEREO DAC	UDA1350ATS	IEC958 audio DAC	3V	2	IEC958	-90	100	256f _s out		0.9	SSOP28	2.7 to 3.6	Control via static pin or L3; 28 to 100kHz SRF; 5V tolerant inputs; output polarity control, volume control, tone control, lock pin	80	-40 to +85	Automatic selected 32, 44.1 and 48
STEREO DAC	UDA1351H	IEC958 audio DAC	3V	2	IEC958, I ² S	-90	100	256f _s out		0.9	QFP44	2.7 to 3.6	Control via static pin or L3; 28 to 100kHz SRF; 5V tolerant inputs; output polarity control, volume control, tone control, lock pin	80	-40 to +85	Automatic selected 32, 44.1, 48 and 96
STEREO DAC	UDA1351TS	IEC958 audio DAC	3V	2	IEC958	-90	100	256f _s out		0.9	SSOP28	2.7 to 3.6	Control via static pin or L3; 28 to 100kHz SRF; 5V tolerant inputs; output polarity control, volume control, tone control, lock pin	80	-40 to +85	Automatic selected 32, 44.1, 48 and 96
STEREO DAC	UDA1352HL	IEC958 audio DAC	3V	2	IEC958	-90	100	256f _s out		0.9	LQFP48	2.4 to 3.6	Control via static pin, L3 or IIC; 28 to 100kHz SRF; 5V tolerant inputs; output polarity control, volume control, tone control, lock pin	40	-40 to +85	Automatic selected 32, 44.1 and 48
STEREO DAC	UDA1352TS	IEC958 audio DAC	3V	2	IEC958	-90	100	256f _s out		0.9	SSOP28	2.4 to 3.6	Control via static pin, L3 or IIC; 28 to 100kHz SRF; 5V tolerant inputs; output polarity control, volume control, tone control, lock pin	38	-40 to +85	Automatic selected 32, 44.1 and 48

1) Characteristics only guaranteed @ Tamb = 25 °C

Coder - Decoders (CODECs)

Type	Type-number	Description		No. of channels	Data Formats	Typical THD+N at 0dB (dB)	Typical S/N (dB)	System-clock	Input	Output (V)	Encapsulation	Power Supply (V)	Sound features	Power dissipation (mW)	Operating temperature range °C ⁽¹⁾	De-emphasis (kHz)
STEREO CODEC	UDA1309H	Low voltage bitstream/CC ADC/DAC	ADC	2	I ² S, "S", 16-, 18 bit output	-85	95	256f _s	1.0		QFP44	4.5 to 5.5	Overload detector; 5.5V input pads	259		
			DAC	2	I ² S, "S", 16-, 18 bit input	-90	104	192f _s , 256f _s , 384f _s	1.0							
STEREO CODEC	UDA1341TS	Low voltage low cost stereo filter ADC/DAC with ADC	ADC	2 (with mux)	I ² S, MSB-justified, LSB-justified 16, 18 and 20 bits format compatible, 1f _s input format	-90	100	256f _s , 384f _s , 512f _s	1.0		SSOP28	2.4 to 3.6	L3 control; 8 to 48 kHz SRF; overload detector; dig.AGC; vol/tone control; soft mute; peak level detector; dig. Mixer; double diff. Input mode; output polarity control; power control	80	-20 to + 85	32, 44.1 and 48
			DAC	2		-91	100		0.9							
STEREO CODEC	UDA1342TS	Audio CODEC for MD	ADC	2 (with mux)	I ² S, MSB-justified, LSB-justified 16, 20 and 24 bits format compatible, 1f _s , 4f _s input format	-90	100	256f _s , 384f _s , 512f _s , 768f _s	0.9		SSOP28	2.7 to 3.6	Control via: static pin, L3 -or I ² C interface; 16 to 110 kHz SRF 4 analog inputs with PGA; 2 dig. Mixers, double diff. input mode; 5V tolerant dig. Inputs; dig volume -and tone control; soft or quick mute; output polarity control	105	-20 to + 85	32, 44.1, 48 and 96
			DAC	2		-90	100		0.9							
STEREO CODEC	UDA1343TT	Economy audio CODEC with Features	ADC	2	I ² S, MSB-justified, LSB-justified 16, 18, 20 and 24 bits format compatible, 1f _s input format	-85	97	256f _s , 384f _s , 512f _s	1.0		TSSOP28	2.4 to 3.6	L3 control; 5V tolerant inputs; 8 to 100kHz SRF; programmable PGA; output polarity control; vol. Control; 3 DC filters	65	-20 to + 85	32, 44.1, 48 and 96
			DAC	2		-85	100		0.9							
STEREO CODEC	UDA1344TS	Low voltage, low power stereo audio CODEC with DSP features	ADC	2	I ² S, MSB-justified, LSB-justified 16, 18, and 20 bits format compatible, 1f _s input format	-85	95	256f _s , 384f _s , 512f _s	1.0		SSOP28	2.7 to 3.6	Static or L3 control; 8 to 48 kHz SRF; overload detector; dig. Vol/tone control; soft mute; power control	69	-20 to + 85	32, 44.1, 48
			DAC	2		-90	100		0.9							
STEREO CODEC	UDA1345TS	Economy audio CODEC	ADC	2	I ² S, MSB-justified, LSB-justified 16, 18, 20 and 24 bits format compatible, 1f _s input format	-83	95	256f _s , 384f _s , 512f _s	1.0		SSOP28	2.4 to 3.6	Static or L3 control; 8 to 100 kHz SRF; 5V tolerant inputs; output polarity control, vol. Control; power control	65	-20 to + 85	32, 44.1, 48 and 96
			DAC	2		-85	100		0.9							
STEREO CODEC	UDA1355H	Stereo Audio Codec with SPDIF interface	ADC	2	I ² S justified, LSB-justified 16, 18, 20 and 24 bits format compatible, 1f _s input format	FPLL dock -77 Xtal dock -85	92	12.288 MHz Crystal	1.0		QFP44	2.4 to 3.6	Static or L3/I ² C control; 28 to 96 kHz SRF for SPDIF input; 5V tolerant inputs; soft mutes; dig. Vol/ tone control; output polarity control; power control	136	-20 to + 85	32, 44.1, 48 and 96
			DAC	2		FPLL dock -80 Xtal dock -86	99		0.9							
STEREO CODEC	UDA1380TT	SSA- Audio Codec	ADC	2	I ² S, MSB-justified, LSB-justified 16, 18, 20 and 24 bits format compatible, 1f _s input format	-85	97	256f _s , 384f _s , 512f _s , 768f _s	1.0		TSSOP32	2.4 to 3.6	L3 or I ² C control; 8 to 100 kHz SRF; 5V tolerant inputs; Mic. input with AGC; head-phone driver; soft mutes; dig. Vol/tone control; output polarity control; power control	65	-20 to + 85	32, 44.1, 48 and 96
			DAC	2		-88	100		0.9							
STEREO CODEC	UDA1380HN	SSA- Audio Codec	ADC	2	I ² S, MSB-justified, LSB-justified 16, 18, 20 and 24 bits format compatible, 1f _s input format	-85	97	256f _s , 384f _s , 512f _s , 768f _s	1.0		HVQFN32	2.4 to 3.6	L3 or I ² C control; 8 to 100 kHz SRF; 5V tolerant inputs; Mic. input with AGC; head-phone driver; soft mutes; dig. Vol/tone control; output polarity control; power control	65	-20 to + 85	32, 44.1, 48 and 96
			DAC	2		-88	100		0.9							
STEREO CODEC	UDA1338H	Multi channel Audio Codec	ADC	4	Audio Interface: I ² S, MSB-justified, LSB-justified, Voice interface: I ² S	-90	100	256f _s , 384f _s , 512f _s , or 768f _s	1.0		QFP44	2.7 to 3.6	Channel independent; logarithmic volume. Soft or quick mute, output signal polarity control	270	-20 to + 85	32, 44.1, 48 or 96
			DAC	6		-100	114		DM 2.0 SE 1.0							

Analog to Digital converters (ADCs)

Type	Type-number	Description		No. of channels	Data Formats	Typical THD+N at 0dB (dB)	Typical S/N (dB)	System-clock	Input	Output (V)	Encapsulation	Power Supply (V)	Sound features	Power dissipation (mW)	Operating temperature range °C ⁽¹⁾	De-emphasis (kHz)
STEREO ADC	UDA1361TS	96kHz sampling 24bit stereo audio ADC		2	I ² S, MSB-justified, format compatible	-88	100	256f _s , 384f _s , 512f _s , 768f _s	1, 1		SSOP16	2.4 to 3.6	Power down mode; input gain switch	42	-20 to + 85	

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date of release: February 2003
document order number: 9397 750 11122

Printed in the Netherlands

