



Typenumber	Description	Main Functionality								Audio Co-processor		Audio Co-processor			Other CODECs (on ARM)		Interconnectivity				Package		
		Processor	Performance (MHz)	Cache (Kbytes)	MMU	ROM (Kbytes)	Flash (Kbytes)	SRAM (Kbytes)	Embedded power management	Processor	Performance (MIPS)	Audio post-processing	Compressed audio decoding	Decoders supported	Image decoders	Video decoders	USB Device FS (USB 1.1)	USB Device HS (USB2.0)	GDMA	IDE (ATA/ATAPI/PC Card)	Type	Size (mm)	Pitch (mm)
PNX0101	4 Mbit Flash USB 1.1	ARM7TDMI	60	8 unified	no	32	512	64	yes	EPICS7B	80-100	yes	yes	MP3	slow rendering	N/A	yes	no	no	no	TFBGA180	10 x 10	0.5
PNX0102	8 Mbit Flash USB 2.0	ARM7TDMI	60	8 unified	no	32	1024	64	yes	EPICS7B	80-100	yes	yes	MP3, WMA7/9, AAC	slow rendering	N/A	yes	yes	no	no	TFBGA180	10 x 10	0.5
PNX0105	USB 2.0	ARM7926EJ-S	140	16/16	yes	32	no	64	no	EPICS7B	80-100	yes	yes	MP3, WMA7/9, AAC	fast rendering	low resolution	yes	yes	yes	yes	LFBGA228	15 x 15	0.65

Radio IC solutions for FM, RDS, AM / FM

Typenumber	Description	Package	Number of external components	Required PCB area	Clock frequency	Interface bus	Current consumption	Availability
TEA5767	FM Radio	HVQFN40 (6 x 6 mm)	25	150 mm ²	32.768 kHz or 13 MHz	I ² C or 3 wire	11 mA	now
TEA5761	FM Radio (successor of TEA5767)	WL-CSP (3.5 x 3.5 mm)	14	50 mm ²	32.768 kHz	I ² C	13 mA	sampling
TEA5764	FM stereo + RDS	HVQFN40 (6 x 6 mm) and WL-CSP (4 x 4 mm)	22	70 mm ²	32.768 kHz	I ² C	13 mA	sampling
TEA5777	FM stereo + AM	HVQFN48 (7 x 7 mm)	25	200 mm ²	4 MHz or 13 MHz	I ² C or 3 wire	12 mA	sampling

Type	Description	Output stage	Vp (V)	Po (W) 0.5% THD	Po (W) 10% THD	DC Vol	THD 1KHz	Iq (mA) @Vp typ	Gain (dB)	SVRR (dB)	X-talk (dB)	DC offset (mV)	Vnoise (µV) (20-20KHz)	Rth j-c (K/W)	Protections *	mute	Package	Remarks	PC	TV/Mon	Home	Others
Class-AB for TV																						
TDA1013B	4W	SE	10.0 - 40.0	3.3 (8Ω)	4.2 (8Ω)	N	0.15%	25	90						SOAR		SIL9MPF	DC Volume control		CRT		
TDA1521A	2 x 6W HIFI	SE	7.5 - 21	6 (12V,8Ω)	8 (12V,8Ω)	N	0.15%	40	30	60	70		70	6	SOAR		SIL9MPF			CRT		
TDA2614	6W HIFI	SE	15-42	6.5 (±12V,8Ω)	8.5 (±12V,8Ω)	N	0.15%	20	30	45			70	8	SOAR	Y	SIL9MPF			CRT		
TDA2615	2 x 6W HIFI	SE	7.5 - 21	6.0 (±12V,8Ω)	8.0 (±12V,8Ω)	N	0.15%	40	30	60	70		70	6	SOAR	Y	SIL9MPF			CRT		
TDA2616	2 x 12W HIFI	SE	7.5 - 21	12.0 (±16V,8Ω)	15.0 (±16V,8Ω)	N	0.15%	40	30	60	70		70	2.5	SOAR	Y	SIL9P	20W (BTL)		CRT		
TDA2616Q	2 x 12W HIFI	SE	7.5 - 21	12.0 (±16V,8Ω)	15.0 (±16V,8Ω)	N	0.15%	40	30	60	70		70	2.5	SOAR	Y	DBS9P	20W (BTL)		CRT		
TDA7052	1W (0.5)	BTL	3.0 - 18	1.2 (6V,8Ω)	1.2 (6V,8Ω)	N	0.2%	4	40	50		< 100	210	110			DIL8					Portable
TDA7052A(T)	1W (0.5)	BTL	4.5 - 18	1.1 (6V,8Ω)	1.1 (6V,8Ω)	Y, 120dB	0.3%	7	36	46		< 150	210	100	MCL, OC	Y	DIL/SO8			CRT		Portable
TDA7052B(T)	1W (0.5)	BTL	4.5 - 18	1.0 (6V,8Ω)	1.0 (6V,8Ω)	Y, 73.5dB	0.3%	9.2	40	38		< 200	210	100	MCL, OC	Y	DIL/SO8			CRT		Portable
TDA7053A(T)	2x1W (0.5)	BTL	4.5 - 18	2x1.0 (6V,8Ω)	2x1.0 (6V,8Ω)	Y, 73.5dB	0.3%	15	40	38	>40	< 200	210	50	MCL, OC	Y	DIL/SO16			CRT		Portable
TDA7056	3W	BTL	3.0 - 18	3 (11V,6Ω)	3 (11V,6Ω)		0.25%	5	40	50		< 200	210	10			SIL9MPF			CRT		
TDA7056A(T)	3W	BTL	4.5 - 18	3.5 (12V,16Ω)	5.2 (12V,8Ω)	Y, 120dB	0.3%	8	36	46		< 150	210	10	MCL, OC	Y	SIL9MPF/SO20	Rail to rail	Laptop	CRT		
TDA7056B	5W	BTL	4.5 - 18	3.5 (12V,16Ω)	5 (12V,8Ω)	Y, 73.5dB	0.3%	9.2	40	38		< 200	210	10	MCL, OC	Y	SIL9MPF			CRT		
TDA7057AQ	2x5W	BTL	4.5 - 18	2*3.5 (12V,16Ω)	2x5 (12V,8Ω)	Y, 73.5dB	0.2%	15	40	38	>40	< 200	210	4	MCL, OC	Y	SIL13P			CRT		
TDA8941P	1x1.5W	BTL	4.5 - 18	1.25W (9V, 16Ω)	1.5W (9V, 16Ω)	N	0.03%	14	32	65		< 200	90	100	MCL, OC	Y	DIP8		Laptop	CRT		Portable
TDA8942P	2x1.5W	BTL	06-18	2x1.25W (9V, 16Ω)	2x1.5W (9V, 16Ω)	N	0.03%	22	32	65	75	< 150	90	10	MCL, OC	Y	SIL9MPF/SO20	Rail to rail	Laptop	CRT		Portable
TDA8943SF	1x6W	BTL	06-18	4.9W (12V, 8Ω)	6W (12V, 8Ω)	N	0.03%	15	32	65		< 200	90	18	MCL, OC	Y	SIL9MPF			CRT		
TDA8944J	2x7W	BTL	06-18	2x5.75W (8Ω, 12V)	2x7W (8Ω, 12V)	N	0.03%	24	32	65	75	< 200	90	6.9	MCL, OC	Y	SIL13P			CRT		
TDA8944AJ	2x7.5W	BTL	06-18	2x5.75W (8Ω, 12V)	2x7W (8Ω, 12V)	Y, 80dB floating;24dB	0.1%	40	32	65	70	< 200	120	6.9	MCL, OC	Y	SIL17P			CRT		
TDA8945S	15W	BTL	06-18	12.2W (8Ω, 18V)	15W (8Ω, 18V)	N	0.03%	18	32	65		< 200	90	9	MCL, OC	Y	SIL13P			CRT		
TDA8946J	2x15W	BTL	06-18	2x12.2W (8Ω, 18V)	2x15W (8Ω, 18V)	N	0.03%	28	32	65	75	< 200	90	4.5	MCL, OC	Y	SIL17P			CRT		
TDA8946AJ	2x15W	BTL	06-18	2x12.2W (8Ω, 18V)	2x15W (8Ω, 18V)	Y, 80dB floating;24dB	0.1%	40	32	55	75	< 200	120	2.5	MCL, OC	Y	SIL17P			CRT		
TDA8947J	SE 4x15W or BTL 2x30.50W	SE/BTL	9-28	4x12.2W (4Ω, 20V)	4x15 (20V, 4Ω)	N	0.07%	110	26/32	60	60	< 170	150/200	1.8	ODR, UV	Y	SIL17P		Speaker	CRT	HTiaB, Micro	
TFA9841J	SE 7W	SE/BTL	9- 26	6.1W (4Ω, 16V)	7.5W (4Ω, 16V)	N	0.1%	40	26	60			150	3.8	OC, UV	Y	LSIL9			CRT		
TFA9842J	SE 2x15W	SE/BTL	9- 26	2x6.1W (4Ω, 16V)	2x7.5W (4Ω, 16V)	N	0.1/0.05%	60	26/32	60	60	< 200	150/200	2	OC, UV	Y	LSIL9		Speaker	CRT	Micro	
TFA9842AJ	SE 2x15W	SE	9- 28	2x6.1W (4Ω, 16V)	2x7.5W (4Ω, 16V)	Y, 80dB	0.1/0.05%	60	26	60	60		150	2	OC, UV	Y	LSIL9		Speaker	CRT, Mon	Micro	
TFA9842BJ	SE 2x15W	SE	9- 26	2x6.1W (4Ω, 16V)	2x7.5W (4Ω, 16V)	N	0.1%	60	26	60	60		150	2	OC, UV	Y	LSIL9	equal phase	Speaker	CRT	Micro	
TFA9843J	SE 2x15W	SE/BTL	9- 26	2x12.2W (4Ω, 22V)	2x15W (4Ω, 22V)	N	0.1/0.05%	60	26/32	60	60	< 200	150/200	2	OC, UV	Y	LSIL9		Speaker	CRT	Micro	

Type	Description	Output stage	Vp (V)	Po (W) 0.5% THD	Po (W) 10% THD	DC Vol	THD 1KHz	Iq (mA) @Vp typ	Gain (dB)	SVRR (dB)	X-talk (dB)	DC offset (mV)	Vnoise (µV) (20-20KHz)	Rth j-c (K/W)	Protections *	mute	Package	Remarks	PC	TV/Mon	Home	Others
TFA9843AJ	SE 2x15W	SE	9- 28	2x12.2W (4Ω,22V)	2x15W (4Ω, 22V)	Y, 80dB	0.1/0.05%	60	26	60	60		150	2	OC, UV	Y	LSIL9		Speaker	CRT	Micro	
TDA1517(P)	2 x 6W	SE	8.5 - 18	2x5W (4Ω,14.4V)	2x6W (4Ω,14.4V)	N	0.1%	40 (Vp = 24V)	20 (BTL/SE)	>48	>40		50	>52	SOAR, UV, OV	Y	SIL9MPF HDIP18	equal phase	Speaker	CRT		
TDA1517ATW	mini SMD 2x3W	SE/BTL	6.0 - 18	2x2.4W (8Ω,14.4V)	2x3W (8Ω,14.4V)	N	0.1%	40 (Vp = 24V)	26/20 (BTL/SE)	>50	>40	< 150	50/70	37	SOAR, UV, OV	Y	HTSSOP20	inv. phase	Laptop	CRT		
TDA8510J	Multi-Media:2.1 amp	SE/BTL	6.0 - 18		7(4Ω -13(2Ω), 26W for sub	N	0.06%	80 (Vp = 24V)	26/20 (BTL/SE)	>46	>40 (60)	< 150	50/70	4	SOAR, UV, OV	Y	SIL17P		Speaker	CRT	Micro	
TDA8511J	4 x 13W SE	SE/BTL	6.0 - 18		7(4Ω -13(2Ω)	N	0.1%	80 (Vp = 24V)	20 (BTL/SE)	>46	>40 (60)	< 150	50/70	4	SOAR, UV, OV	Y	SIL17P		Speaker	CRT	Micro	

* OC Over current protection. This protection is activated when the output current exceeds a specific value
 OV Over voltage protection
 UV Under voltage protection (to avoid audible noise at low supply voltages)
 SOAR Save Operating Protection. Protects the safe operating area of a power transistor used in our amplifiers (class-AB)
 MCL Missing current limiter (is activated when the current in the + and – supply pins has too much deviation)

Class D Amplifiers

Typenumber	Description	Output stage	Vp (V)	Po (W) 0.5% THD (no heatsink)	Po (W) 10% THD (with heatsink)	DC Vol	THD 1KHz	Iq (mA) @Vp typ	Gain (dB)	SVRR (dB)	X-talk (dB)	DC offset (mV)	Vnoise (µV) AES17-brick	Rth j-c (K/W)	Protections *	Mute	Package	Remarks	PC	TV/Mon	Home
Class-D for TV																					
TDA8925ST	Pow stage 2x25W	SE	+/-12.5..30	2x21 (4Ω, +/-19V)	2x25 (4Ω, +/-19V)	N	0.07%	50	23	55	73		155	1.5	OVC, OV, UV	Y	SIL17P	Eff=90%	Speaker	Flat	Micro
TDA8925J	Pow stage 2x25W	SE	+/-12.5..30	2x21 (4Ω, +/-19V)	2x25 (4Ω, +/-19V)	N	0.07%	50	23	55	73		155	1.5	OVC, OV, UV	Y	SIL17P	Eff=90%	Speaker	Flat	Micro
TDA8922BTH	One chip 2x25..50W	SE/BTL	+/-12.5..30	2x40 (6Ω, +/-26V)	2x50 (6Ω, +/-26V)	N	0.02%	50	30	55	75	< 150	210	2	OC (8A), OV, UV	Y	HSOP24	Eff=90%		CRT	Micro
TDA8922BJ	One chip 2x25..50W	SE/BTL	+/-12.5..30	2x40 (6Ω, +/-26V)	2x50 (6Ω, +/-26V)	N	0.02%	50	30	55	75	< 150	210	1.3	OC (5A), OV, UV	Y	SIL23P	Eff=90%		CRT	Micro
TDA8931T	Pow comp 1x20W Dolby compliant	SE	12..34 (OVP 27V)	12W (4Ω, 22V) 11.8W (8Ω, 29V)	2x16W (4Ω, 22V) 2x15W (8Ω, 29V)	N	0.014% (AES17)	22	20	55	75		128	15	OC (4A), ODP, OV(37V), UV (Y	SO20L	Eff=90%, Rail to rail	Speaker	Flat (LCD)	Micro
Class-D for other applications																					
TDA8920BTH	One chip 2x50..100W	SE/BTL	+/-12.5..30	2x70 (4Ω, +/-27V)	2x90 (4Ω, +/-27V)	N	0.02%	50	30	55	75	< 150	210	2	OC (8A), OV, UV	Y (ext)	HSOP24	Eff=90%	Speaker		HtiaB, Mini
TDA8920BJ	One chip 2x50..100W	SE/BTL	+/-12.5..30	2x70 (4Ω, +/-27V)	2x90 (4Ω, +/-27V)	N	0.02%	50	30	55	75	< 150	210	1.3	OV (8A), OV, UV	Y (ext)	SIL23P	Eff=90%	Speaker		HtiaB, Mini
TDA8939TH	Pow stage 150W	BTL	20..60V	2x120 (6Ω, 50V)	2x150 (6Ω, 50V)	N	0.02%	50						1.3	OVC, OV, UV	Y (ext)	HSOP24	Eff=90%	Speaker		HtiaB

* OC Over current protection. This protection is activated when the output current exceeds a specific value
 OV Over voltage protection
 UV Under voltage protection (to avoid audible noise at low supply voltages)
 SOAR Save Operating Protection. Protects the safe operating area of a power transistor used in our amplifiers (class-AB)
 MCL Missing current limiter (is activated when the current in the + and – supply pins has too much deviation)

Type	Type number	Description	Typ. Supply.Volt.	No. of Channels	Typical THD + N at 0 db (db)	Typical S/N (dB)	System Clock	Input	Output (V)	Encapsulation	Power Supply (V)	Power dissipation (mW)	Operating temperature °C	De-emphasis (kHz)
Digital to Analog converters														
Stereo DAC	UDA1330 ATS	Low Cost stereo filter DAC	5V	2	-90	100	256fs, 384fs, 512fs		1.45	SSOP16	2.7 to 5.5	75	-40 to +85	32, 44.1 and 48
Stereo DAC	UDA1330 ATS	Low Cost stereo filter DAC	3V	2	-85	100	256fs, 384fs, 512fs		1	SSOP16	2.7 to 5.5	33	-40 to +85	32, 44.1 and 48
Stereo DAC	UDA1334TS	Low power audio DAC	3V	2	-90	100	Automatic		0.75	SSOP16	1.8 to 3.6	17	-40 to +85	44.1
Stereo DAC	UDA1334TS	Low power audio DAC	2V	2	-80	97	Automatic		0.5	SSOP16	1.8 to 3.6	7	-40 to +85	44.1
Stereo DAC	UDA1334ATS	Low Power audio DAC including PLL	audio mode	2	-90	100	Automatic		0.9	SSOP16	2.4 to 3.6	18	-40 to +85	44.1
Stereo DAC	UDA1334ATS	Low Power audio DAC including PLL	video mode	2	-90	100	256fs, 384fs		0.9	SSOP16	2.4 to 3.6	24	-40 to +85	44.1
Stereo DAC	UDA1334BTS	Low Power audio DAC	3V	2	-90	100	128fs, 192fs, 256fs, 384fs, 512fs, 768fs		0.9	SSOP16	1.8 to 3.6	17	-40 to +85	44.1
Stereo DAC	UDA1334BTS	Low Power audio DAC	2V	2	-80	97	128fs, 192fs, 256fs, 384fs, 512fs, 768fs		0.6	SSOP16	1.8 to 3.6	7.4	-40 to +85	44.1
Stereo DAC	UDA1334BT	Low Power audio DAC	3V	2	-90	100	128fs, 192fs, 256fs, 384fs, 512fs, 768fs		0.9	SO16	1.8 to 3.6	17	-40 to +85	44.1
Stereo DAC	UDA1334BT	Low Power audio DAC	2V	2	-80	97	128fs, 192fs, 256fs, 384fs, 512fs, 768fs		0.6	SO16	1.8 to 3.6	7.4	-40 to +85	44.1
Stereo DAC	UDA1351H	IEC958 Audio DAC	3V	2	-90	100	256fs out		0.9	QFP44	2.7 to 3.6	80	40 to +85	Automatic selected 32, 44.1, 48 and 96
Stereo DAC	UDA1351TS	IEC958 Audio DAC	3V	2	-90	100	256fs out		0.9	SSOP28	2.7 to 3.6	80	-40 to +85	Automatic selected 32, 44.1, 48 and 96
Stereo DAC	UDA1352HL	IEC958 Audio DAC	3V	2	-90	100	256fs out		0.9	LQFP48	2.4 to 3.6	40	-40 to +85	Automatic selected 32, 44.1, 48 and 96
Stereo DAC	UDA1352TS	IEC958 Audio DAC	3V	2	-90	100	256fs out		0.9	SSOP28	2.4 to 3.6	38	-40 to +85	Automatic selected 32, 44.1, 48 and 96
Coder - Decoders (CODECs)														
Stereo Codec	UDA1341TS	Low voltage low cost stereo filter ADC/DAC with ADC	ADC	2	-85	95	256fs, 384fs, 512fs	1		SSOP48	2.4 to 3.6	80	-20 to +85	
Stereo Codec	UDA1341TS	Low voltage low cost stereo filter ADC/DAC with ADC	DAC	2	-90	104	256fs, 384fs, 512fs		0.9	SSOP48	2.4 to 3.7	80	-20 to +85	32, 44.1 and 48
Stereo Codec	UDA1342TS	Audio Codec for MD	ADC	2 (with mux)	-90	100	256fs, 384fs, 512fs, 768fs	0.9		SSOP28	2.7 to 3.6	105	-20 to +85	
Stereo Codec	UDA1342TS	Audio Codec for MD	DAC	2	-90	100	256fs, 384fs, 512fs, 768fs		0.9	SSOP28	2.7 to 3.6	105	-20 to +85	32, 44.1, 48 and 96
Stereo Codec	UDA1343TT	Economy audio CODEC with features	ADC	2	-85	97	256fs, 384fs, 512fs	1		TSSOP28	2.4 to 3.6	65	-20 to +85	
Stereo Codec	UDA1343TT	Economy audio CODEC with features	DAC	2	-85	100	256fs, 384fs, 512fs		0.9	TSSOP28	2.4 to 3.6	65	-20 to +85	32, 44.1, 48 and 96
Stereo Codec	UDA1344TS	Low voltage low power stereo audio Codec with DSP feature	ADC	2	-85	95	256fs, 384fs, 512fs	1		SSOP28	2.7 to 3.6	69	-20 to +85	
Stereo Codec	UDA1344TS	Low voltage low power stereo audio Codec with DSP feature	DAC	2	-90	100	256fs, 384fs, 512fs		0.9	SSOP28	2.7 to 3.6	69	-20 to +85	32, 44.1 and 48

Type	Type number	Description	Typ. Supply Volt.	No. of Channels	Typical THD + N at 0 db (db)	Typical S/N (dB)	System Clock	Input	Output (V)	Encapsulation	Power Supply (V)	Power dissipation (mW)	Operating temperature °C	De-emphasis (kHz)
Stereo Codec	UDA1345TS	Economy audio Codec	ADC	2	-83	95	256fs, 384fs, 512fs	1		SSOP28	2.4 to 3.6	65	-20 to +85	
Stereo Codec	UDA1345TS	Economy audio Codec	DAC	2	-85	100	256fs, 384fs, 512fs		0.9	SSOP28	2.4 to 3.6	65	-20 to +85	32, 44.1, 48 and 96
Stereo Codec	UDA1355H	Stereo Audio Codec with SPDIF interface	ADC	2	FPLL clock-77 Xtal clock -85	92	12.288 MHz Crystal	1		QFP44	2.4 to 3.6	136	-20 to +85	
Stereo Codec	UDA1355H	Stereo Audio Codec with SPDIF interface	DAC	2	FPLL clock-80 Xtal clock -86	99	12.288 MHz Crystal			QFP44	2.4 to 3.6	136	-20 to +85	32, 44.1, 48 and 96
Stereo Codec	UDA1380TT	SSA-Audio Codec	ADC	2	-85	97	256fs, 384fs, 512fs, 768fs	1		TSSOP32	2.4 to 3.6	65	-20 to +85	
Stereo Codec	UDA1380TT	SSA-Audio Codec	DAC	2	-88	100	256fs, 384fs, 512fs, 768fs	1	0.9	TSSOP32	2.4 to 3.6	65	-20 to +85	32, 44.1, 48 and 96
Stereo Codec	UDA1380HN	SSA-Audio Codec	ADC	2	-85	97	256fs, 384fs, 512fs, 768fs	1		HVQFN32	2.4 to 3.6	65	-20 to +85	
Stereo Codec	UDA1380HN	SSA-Audio Codec	DAC	2	-88	100	256fs, 384fs, 512fs, 768fs		0.9	HVQFN32	2.4 to 3.6	65	-20 to +85	32, 44.1, 48 and 96
Stereo Codec	UDA1338H	Multi channel audio Codec	ADC	4	-90	100	256fs, 384fs, 512fs, or 768fs	1		QFP44	2.7 to 3.6	270	-20 to +85	
Stereo Codec	UDA1338H	Multi channel audio Codec	DAC	6	-100	114	256fs, 384fs, 512fs or 786fs		DM 2.0 and SE 1.0	QFP44	2.7 to 3.6	270	-20 to +85	32, 44.1, 48 or 96
Analog to Digital Converters (ADCs)														
Stereo DAC	UDA1361TS	96Hz sampling 24bit stereo audio ADC	ADC	2	-88	100	256fs, 384fs, 512fs, 768fs	1.1		SSOP16	2.4 to 3.6	42	-20 to +85	