



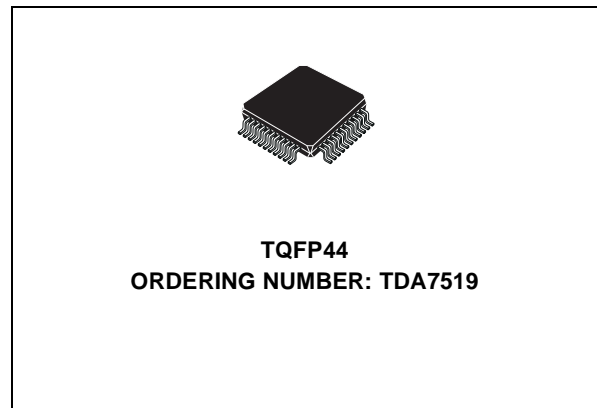
## MULTICHIP MODULE FOR CAR-RADIO APPLICATIONS

PRELIMINARY DATA

- HIGH-PERFORMANCE SIGNAL PROCESSOR FOR CAR-RADIO APPLICATIONS
- ADJUSTMENT-FREE STEREODECODER
- FM NOISE BLANKER
- PROGRAMMABLE MULTIPATH DETECTOR
- 2 STEREO AND 2 MONO INPUTS WITH MIXING CAPABILITY
- BASS, TREBLE AND LOUDNESS CONTROLS
- 4 INDEPENDENT SPEAKER OUTPUTS
- HIGH-PERFORMANCE FULLY DIGITAL RDS DEMODULATOR
- ON-CHIP ADJUSTMENT-FREE 57kHz 8th ORDER BANDPASS FILTER
- ARI (SK INDICATION) AND RDS SIGNAL QUALITY OUTPUT
- FULL I<sup>2</sup>C-BUS CONTROL

### DESCRIPTION

The TDA7519 multichip module combines in a single compact (10X10mm) 44-pin package the signal processing functionalities of a state-of-the-art car-radio with a minimized number of required external components.



The following two devices are included (please refer to the relevant datasheet for specifications):

- TDA7460N, digitally controlled stereodecoder and audioprocessor featuring FM noise blanking and multipath detector; bass, treble, loudness controls with 2 stereo and 2 mono mixable inputs and four independent speaker outputs.
- TDA7479, fully digital RDS data decoder with on-chip adjustment-free bandpass filter

Both chips are I<sup>2</sup>C-bus controlled

### THERMAL DATA

Symbol	Parameter	Test condition	Min	Typ	Max	Units
R <sub>th</sub>	Thermal Resistance	Junction to ambient, soldered on multilayer PCB		40		°C/W
T <sub>amb</sub>	Operating temperature range		-40		85	°C
T <sub>stg</sub>	Storage temperature range		-55		150	°C

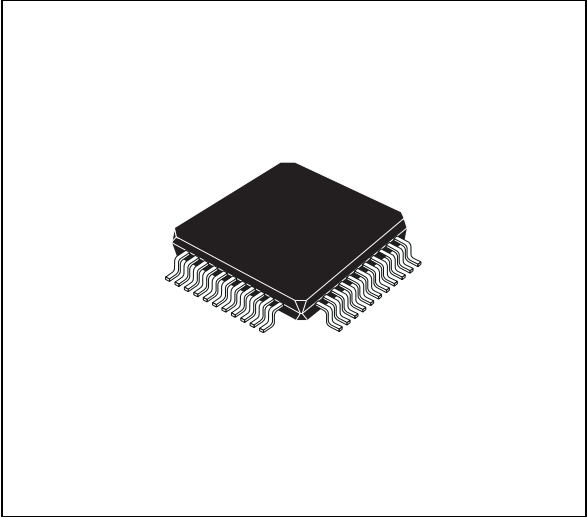
## TDA7519

### PIN DESCRIPTION

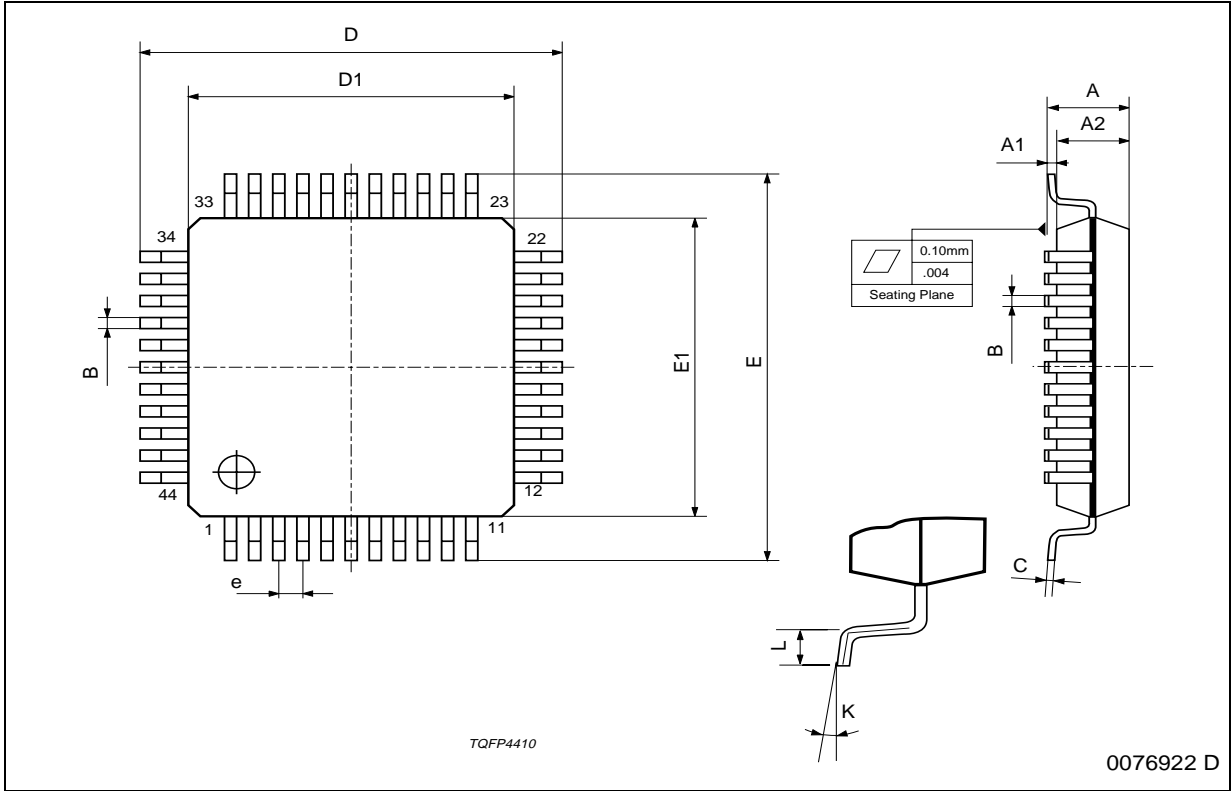
TDA7519	Audioprocessor TDA7460N	RDS Decoder TDA7479	Name	Function
1	3		CDR	CD Right Channel Input
2	4		CDGND	Ground reference CD
3	5		CDL	CD Left Channel Input
4	6		PHGND	Phone Ground (MPOUT selectable by SW)
5	7		PHONE	Phone Input (MPIN selectable by SW)
6				Not Connected
7	8		AM	AM Input
8				Not Connected
9	9		MPX	FM Input (MPX)
10	10		LEVEL	Level Input Stereodecoder
11	11		SMUTE	Soft Mute Drive
12	12		SCL	I <sup>2</sup> C Clock Line
13				Not Connected
14		3	VREF	Reference voltage
15		4	MPX	RDS input signal
16		5	OSEL	Oscillator selector pin
17		6	GND	Ground
18				Not Connected
19		7	ARI	Output for ARI indication
20		8	FILOUT	Filter output
21		9	FSEL	Frequency selector
22		10	TM	Test mode ENABLE
23		11	EXTRES	Reset
24		12	VS	Supply voltage
25		13	OSCIN	Oscillator input
26		14	OSCOUT	Oscillator output
27				Not Connected
28		15	T57	Test output: 57kHz clock
29		16	RDCL	RDS clock output 1187.5Hz
30		1	QUAL	Signal quality indication
31		2	RDDA	RDS data output
32				Not Connected
33	13		SDA	I <sup>2</sup> C Data Line
34	14		GND	Supply Ground
35	15		VS	Supply Voltage
36	16		OUTRR	Right Rear Speaker Output
37	17		OUTLR	Left Rear Speaker Output
38	18		OUTRF	Right Front Speaker Output
39				Not Connected
40	19		OUTLF	Left Front Speaker Output
41	20		CREF	Reference Capacitor Pin
42				Not Connected
43	1		CASSR	Cassette Input Right
44	2		CASSL	Cassette Input Left

DIM.	mm			inch		
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.
A			1.60			0.063
A1	0.05		0.15	0.002		0.006
A2	1.35	1.40	1.45	0.053	0.055	0.057
B	0.30	0.37	0.45	0.012	0.015	0.018
C	0.09		0.20	0.004		0.008
D	11.80	12.00	12.20	0.464	0.472	0.480
D1	9.80	10.00	10.20	0.386	0.394	0.401
D3		8.00			0.315	
E	11.80	12.00	12.20	0.464	0.472	0.480
E1	9.80	10.00	10.20	0.386	0.394	0.401
E3		8.00			0.315	
e		0.80			0.031	
L	0.45	0.60	0.75	0.018	0.024	0.030
L1		1.00			0.039	
k	0° (min.), 3.5° (typ.), 7° (max.)					

**OUTLINE AND MECHANICAL DATA**



**TQFP44 (10 x 10 x 1.4mm)**



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