Signal processor LSI with anti-shock memory controller for CD players

BU9534KV

Description

BU9534KV is a digital signal processor LSI with built-in pre-servo amplifier, and anti-shock memory controller developed for CD players. This pre-servo amplifier is applied to CD-RW disc. Approximately 180sec. music data can be stored in memory by connecting with 64M bit SDRAM.

Features

- Anti-shock memory controller corresponds to EDRAM, and SDRAM. Maximum 180sec. of music data can be stored by using 4bit compression mode and 64bit SDRAM.
- 2) Built-in pre-servo amplifier for playing CD-RW
- 3) Tracking, Focus automatic control
- 4) Built-in wide PLL, CLV
- 5) Symmetry correction function
- 6) Built-in x8 over sampling filter + 1bit DAC
- 7) Digital bass boost, soft mute function

Applications

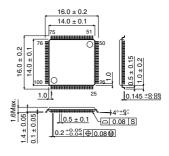
Portable CD players

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Maximum applied voltage	Vcc	4.5	V
Power dissipation	Pd	1000	mW
Operating temperature range	Topr	<i>–</i> 25 ∼ 75	°C
Storage temperature range	Tstg	−55 ~ 125	°C

Derating : 10mW/°C for operation above Ta=25°C

Dimension (Units : mm)



VQFP100

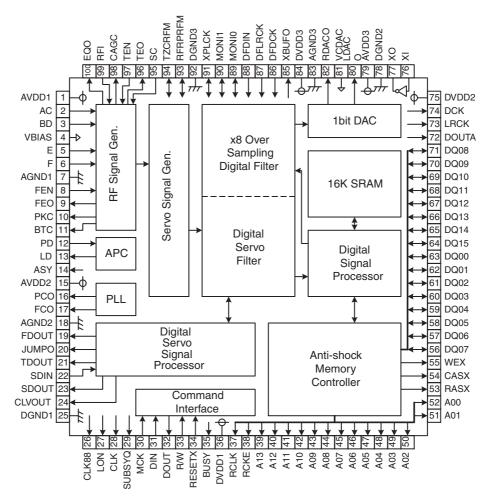
Recommended Operating Conditions (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit
Operating power supply voltage	V _{DD}	2.5		3.3	V

● Electrical characteristics (Unless otherwise noted; Ta=25°C, Vcc=3.0V)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Circuit current	lo		28	35	mA	
Audio-DAC distortion	THD	_	0.01	_	%	0dB,1KHz
Audio-DAC range	DR	_	90	_	dB	-60dB,1KHz
Audio-DAC S/N rate	S/N	_	96	_	dB	
Servo-ADC Max. conversion voltage	VADH	1.0	1.2	1.4	V	
Servo-ADC Min. conversion voltage	VADL	-1.4	-1.2	-1.0	V	
Servo-ADC Max. output voltage	Vadh	0.8	1.2	_	V	
Servo-ADC Min. output voltage	VADL	_	-1.2	-0.8	V	
RF amplifier Max. output amplitude	VRFH	1.1	1.3	_	V	
RF amplifier Min. output amplitude	VRFL		-1.3	-1.1	V	

Application Circuit



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