Ordering number : ENN*7886

Discontinued

Preliminary

SANYO Semiconductors

DATA SHEET

LA6548 — Monolithic Linear IC
4CH Bridge (BTL) Driver for CD

Overview

The LA6548 is a 4CH bridge (BTL) driver with built-in 3.3VREG and RESET for CD players.

Functions

- Bridge connection (BTL) POWER AMP 4CH.
- Provides MUTE function (Activate for all channels output. When MUTE is H, output is ON.)
- Built-in 3.3VREG (with external PNP transistor)
- Built-in RESET circuit (with external capacitor, RESET output delay time can be set.)

Specifications

Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Supply voltage	V_{CC} max		14	V
Allowable operation	Pd max	*Measurement on the specific board	2.3	W
Maximum input voltage	VINB		13	V
MUTE pin voltage	VMUTE		13	V
Operating ambient temperature	Topr		-20 to +75	°C
Storage ambient temperature	Tstg		-55 to +150	°C

*Specific board size: 114.3mm × 76.1mm × 1.6mm, board material: glass epoxy resin.

Recommended Operating Conditions at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Operating voltage	V_{CC}		4 to 13	V
RESET output SOURCE current	IORH		0 to 200	µA
RESET output SINK current	IORL		0 to 2	mA

SANYO Electric Co.,Ltd. Semiconductor Company

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

Electrical Characteristics at Ta = 25°C, V_{CC} = 6V, VREF = 1.65V

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
[Whole]						
No-load current consumption 1	I_{CC}-ON	All channels output ON, MUTE; H		20	40	mA
No-load current consumption 2	I_{CC}-OFF	All channels output OFF, MUTE; L		15	35	mA
Output offset voltage	V_{OFF}	Each channel	-50		50	mV
BUFFER input voltage range	VBIN	VREF BUFFER AMP input range	1.5		V_{CC}-1.5	V
Output voltage	V_O	R_L = 8.0Ω *1	2.6	3		V
Closed circuit voltage gain	VG	Input/Output gain		9		dB
Slew rate	SR			0.15		V/μs
MUTE ON voltage	VMUTE	*2		1.2		V
[Power supply part] (2SB632K is used)						
Output voltage	V_{OUT}1	I_O = 200mA	3.13	3.3	3.47	V
Line regulation	ΔVOLN1	4V ≤ V_{CC} ≤ 12V		40	100	mV
Load regulation	ΔVOLD1	5mA ≤ I_O ≤ 200mA		50	150	mV
[Reset part]						
H reset output voltage	VORH	IORH = 200μA, Pin open Cd	3.08	3.25	3.42	V
L reset output voltage	VORL	ISRL = 2mA, short circuit between Cd and GND.		100	200	mV
Reset threshold voltage	VRT	*3	2.58	2.75	2.92	V
Reset hysteresis voltage	VHYS	*4	40	80	160	mV
Reset output delay time	TD	Cd = 0.1μF		10		ms

*1. Output voltage differences when connecting the 8Ω load between outputs for each channels.
*2. MUTE voltage when output is ON or OFF. When MUTE is H, all outputs are ON. When MUTE is L, all channels are OFF.
*3. 3.3 VREG voltage when RESET is L.
*4. 3.3 VREG voltage difference between RESET "L" and RESET "H".

Package Dimensions

unit : mm
3227A