

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







Monolithic Linear IC

JPN MTS (Multi Channel Television Sound) Decoder IC



http://onsemi.com

Overview

JPN MTS (Multi Channel Television Sound) Decoder IC

Features

- With SIF circuit, alignment-free* STEREO channel separation.
- * In base band signal input mode, separation is adjusted by input level.
- Three I²C slave-addresses are prepared.
- The maximum output level is as large as 4.2dBV. (Frequency = 1kHz, distortion = less than 3%, V_{CC} = 5V, TYP)
- The external clock is unnecessary.
- A couple of external input terminal is prepared.

Functions

- Stereo & Bilingual demodulation.
- Stereo & Bilingual detection.
- Just clock out.

Specifications

Maximum Ratings at $Ta = 25^{\circ}C$

Parameter	Symbol	Conditions	Ratings	Unit
Maximum power supply voltage	V _{CC} H max		7.0	V
Allowable power dissipation	Pd max	$Ta \le 80^{\circ}C$, Mounted on a specified board*	203	mW
Operating temperature	Topr		-20 to +80	°C
Storage temperature	Tstg		-55 to +150	°C

 $^{^{\}star}$ Mounted on a specified board: 114.3mm \times 76.1mm \times 1.6mm glass epoxy board

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

Operating Ranges at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Recommended operating voltage	V_{CCH}		5.0	V
Allowable operating voltage	V _{CC} H op		4.5 to 5.5	٧

Electrical Characteristics at Ta = 25°C, $V_{DD} = 5V$

[Condition of input signal at pin 5]

BASE BAND input

[Output] L-ch: pin 18, R-ch: pin 17

Parameter	Symbol	Conditions		Ratings		unit
1 drameter	Cymbol	Conditions	min	typ	max	unit
Current dissipation	I _{CC} 1	No signal, Inflow current at pin 19	18	26	34	mA
MONO output level	V _O MN1	fm = 1kHz, 100% Mod, Pre-emphasis OFF	-6	-4.5	-3	dBV
			501	595	708	mVrms
MONO L/R level difference	ΔV _O MN1	fm = 1kHz, 100% Mod, Pre-emphasis OFF	-1	0	1	dB
MONO distortion	THDM1	fm = 1kHz, 100% Mod, Pre-emphasis OFF		0.2	0.5	%
MONO frequency characteristics	FCM1	fm = 10kHz/1kHz, 100% Mod, 15kHz LPF Pre-emphasis OFF	-18	-13.5		dB
MONO S/N	SNM1	Non Mod, 15kHz LPF	60	65		dB
STEREO output level	V _O ST1	fm = 1kHz, 100% Mod, Cue (Stereo),	-6	-4.5	-3	dBV
•		15kHz LPF	501	595	708	mVrms
STEREO distortion	THDS1	fm = 1kHz, 100% Mod, Cue (Stereo), 15kHz LPF		0.5	1	%
STEREO S/N	SNS1	Sub Carrier (Non Mod), Cue (Stereo), 15kHz LPF	50	60		dB
Main output level	V _O MA1	fm = 1kHz, 100% Mod, Cue (Bilingual),	-6	-4.5	-3	dBV
		15kHz LPF	501	595	708	mVrms
Main distortion	THDMA1	fm = 1kHz, 100% Mod, Cue (Bilingual), 15kHz LPF		0.2	0.5	%
Main S/N	SNMA1	Sub Carrier (Non Mod), Cue (Bilingual), 15kHz LPF	60	65		dB
SUB output level	V _O SU1	fm = 1kHz, 100% Mod, Cue (Bilingual),	-6	-4.5	-3	dBV
	0	15kHz LPF	501	595	708	mVrms
SUB distortion	THDSU1	fm = 1kHz, 100% Mod, Cue (Bilingual), 15kHz LPF		0.7	1.5	%
SUB frequency characteristics	FCSU1	fm = 10kHz/1kHz, 60% Mod, Cue (Bilingual), 15kHz LPF, Pre-emphasis OFF	-18	-14.5		dB
SUB Main S/N	SNSU1	Sub Carrier (Non Mod), Cue (Bilingual), 15kHz LPF	50	60		dB
STEREO separation $L \rightarrow R$	SEPR1	fm = 1kHz (L-only), 60% Mod, Cue (Stereo), 15kHz LPF	35	43		dB
STERO separation $R \rightarrow L$	SEPL1	fm = 1kHz (R-only), 60% Mod, Cue (Stereo), 15kHz LPF	35	43		dB
Stay behind carrier level (SUB)	CLSU1	Main = 0%, Sub = 0% (Carrier) Cue (Bilingual)		-50	-40	dBV
Stay behind carrier level (MAIN)	CLMA1	Main = 0%, Sub = 0% (Carrier) Cue (Bilingual)		-55	-45	dBV
Cross-talk MAIN → SUB	CTSUB1	Main: fm = 1kHz, 100% modulation, Cue (Bilingual), 1kHz BPF	55	62		dB
Cross-talk SUB \rightarrow MAIN	CTMA1	Sub : fm = 1kHz, 100% modulation, Cue (Bilingual), 1kHz BPF	55	62		dB
MODE output MONO	MODMO1	Input = Mono Signal	1.7	2	2.3	V
MODE output STEREO	MODST1	Input = Stereo Signal	0	1	1.3	V
MODE output BILINGUAL	MODBI1	Input = Bilingual Signal	2.7	3	3.3	V
Just Clock output High voltage	JCH1	f = 400Hz (mono), 25% Mod	4			V
Just Clock output Low voltage	JCL1	f = 400Hz (mono), 10% Mod			1	V
Max Output level	MOL1	f = 1kHz, distortion = 3%	3.3	4.2		dBV
•			1462	1622		mVrms

Continued from preceding page.

Davis markets	O. mada ad	Conditions		Ratings			
Parameter	Symbol	Conditions	min	typ	max	unit	
EXTERNAL input level	EXTIN1	f = 1kHz, (pin 12 & pin 13 input)		-14.5		dBV	
				188.4		mVrms	
8pin-CONTROL "H"	MUTEH	MUTE-ON	3.0		V _{CC}	V	
8pin-CONTROL "OPEN"	MUTEOP	MUTE-OFF		0.9		V	
8pin-CONTROL "L"	MUTEL	MUTE-OFF & Detection AREA CONROL	0		0.2	V	

[Condition of input signal at pin 5]

Deviation of SIF input MONO: (fm = 1kHz) 100% → 4.5MHz±25kHz Pre-Emphasis ON

[Output] L-ch: pin 18, R-ch: pin 17

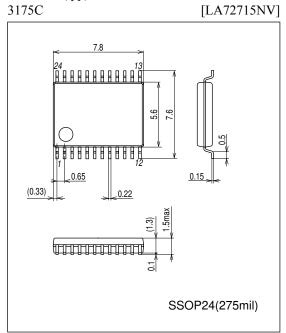
Parameter	Symbol	Conditions		Ratings		unit
Farameter	Symbol	Cymbol		typ	max	unit
Current dissipation	I _{CC} 2	No signal, Inflow current at pin 19	20	28	36	mA
Input sensitivity level	V _S IN	fc = 4.5MHz	70	90	110	dΒμ\
			3.16	31.62	316.2	mVrm
MONO output level	V _O MN2	fm = 1kHz, 100% Mod, Pre-emphasis OFF	-6	-4.5	-3	dBV
			501	595	708	mVrm
MONO L/R level difference	ΔV _O MN2	fm = 1kHz, 100% Mod, Pre-emphasis OFF	-1	0	1	dB
MONO distortion	THDM2	fm = 1kHz, 100% Mod, Pre-emphasis OFF		0.2	0.5	%
MONO frequency characteristics	FCM2	fm = 10kHz/1kHz, 100% Mod, 15kHz LPF Pre-emphasis OFF	-18	-13.5		dB
MONO S/N	SNM2	Non Mod, 15kHz LPF	55	60		dB
STEREO output level	V _O ST2	fm = 1kHz, 100% Mod, Cue (Stereo),	-6	-4.5	-3	dBV
·		15kHz LPF	501	595	708	mVrm
STEREO distortion	THDS2	fm = 1kHz, 100% Mod, Cue (Stereo), 15kHz LPF		0.5	1	%
STEREO S/N	SNS2	Sub Carrier (Non Mod), Cue (Stereo), 15kHz LPF	50	57		dB
Main output level	V _O MA2	fm = 1kHz, 100% Mod, Cue (Bilingual),	-6	-4.5	-3	dBV
	15kHz LPF				708	mVrm
Main distortion	THDMA2	fm = 1kHz, 100% Mod, Cue (Bilingual), 15kHz LPF		0.2	0.5	%
Main S/N	SNMA2	Sub Carrier (Non Mod), Cue (Bilingual), 15kHz LPF	55	60		dB
SUB output level	8 output level V _O SU2 fm = 1kHz, 100% Mod, Cue (Bilingual),		-6	-4.5	-3	dBV
		15kHz LPF	501	595	708	mVrn
SUB distortion	THDSU2	fm = 1kHz, 100% Mod, Cue (Bilingual), 15kHz LPF		0.7	1.5	%
SUB frequency characteristics	FCSU2	fm = 10kHz/1kHz, 60% Mod, Cue (Bilingual), 15kHz LPF, Pre-emphasis OFF	-18	-14.5		dB
SUB Main S/N	SNSU2	Sub Carrier (Non Mod), Cue (Bilingual), 15kHz LPF	50	58		dB
STEREO separation $L \rightarrow R$	SEPR2	fm = 1kHz (L-only), 60% Mod, Cue (Stereo), 15kHz LPF	35	38		dB
STERO separation $R \rightarrow L$	SEPL2	fm = 1kHz (R-only), 60% Mod, Cue (Stereo), 15kHz LPF	35	38		dB
Stay behind carrier level (SUB)	CLSU2	Main = 0%, Sub = 0% (Carrier) Cue (Bilingual)		-50	-40	dBV
Stay behind carrier level (MAIN)	· · · · · · · · · · · · · · · · · · ·			-55	-45	dBV
Cross-talk MAIN → SUB	`		55	62		dB
Cross-talk SUB → MAIN	CTMA2	Sub : fm = 1kHz, 100% modulation, Cue (Bilingual), 1kHz BPF	55	62		dB
MODE output MONO	MODMO2	Input = Mono Signal	1.7	2	2.3	٧
MODE output STEREO	MODST2	Input = Stereo Signal	0	1	1.3	٧
MODE output BILINGUAL	MODBI2	Input = Bilingual Signal	2.7	3	3.3	V
Just Clock output High voltage	JCH2	f = 400Hz (mono), 25%Mod	4			V

Continued from preceding page.

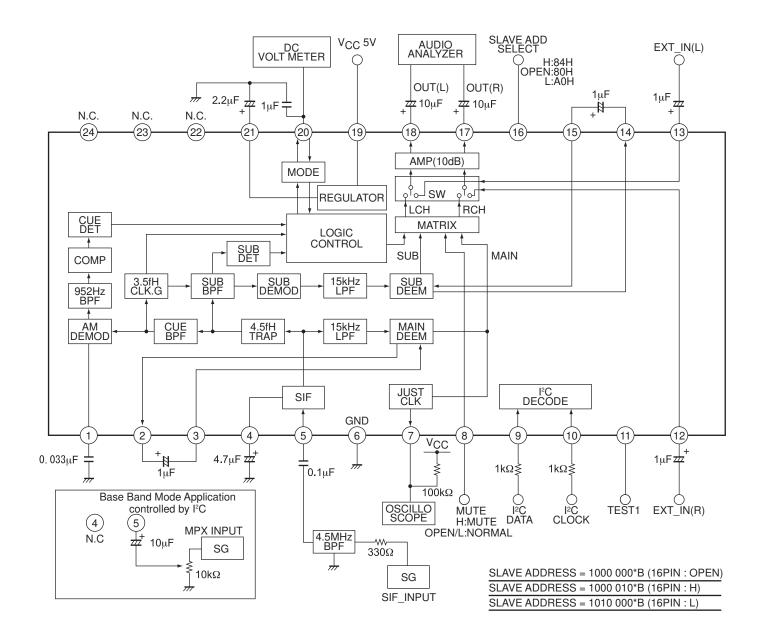
Dawa mada n	O. made ad	O and this are		unit		
Parameter	Symbol	Conditions	min	typ	max	unit
Just Clock output Low voltage	JCL2	f = 400Hz (mono), 10%Mod			1	V
Max Output level	MOL2	f = 1kHz, distortion = 3%	3.3	4.2		dBV
			1462	1622		mVrms
EXTERNAL input level	EXTIN2	f = 1kHz, (pin 12 & pin 13 input)		-14.5		dBV
				188.4		mVrms
8pin-CONTROL "H"	MUTEH	MUTE-ON	3.0		V _{CC}	V
8pin-CONTROL "OPEN"	MUTEOP	MUTE-OFF		0.9		V
8pin-CONTROL "L"	MUTEL	MUTE-OFF & Detection AREA CONROL	0		0.2	V

Package Dimensions

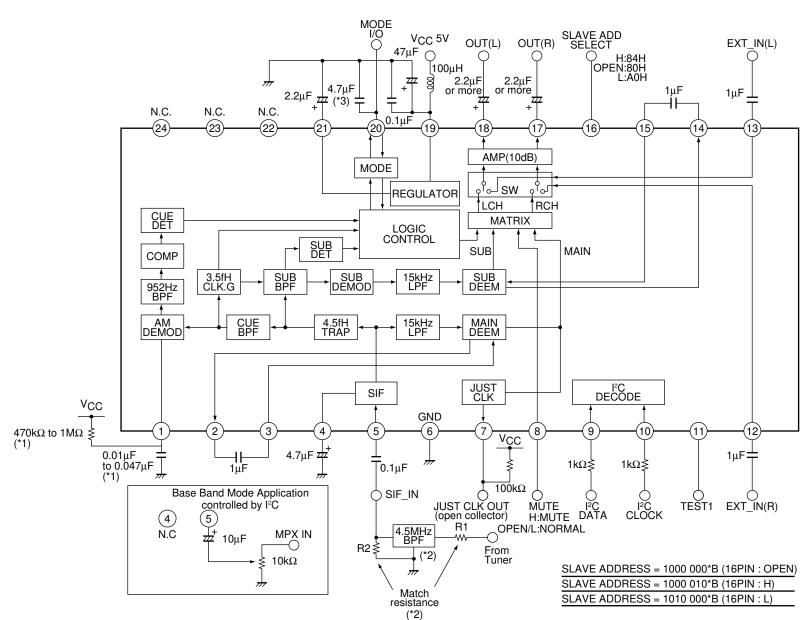




Block Diagram and Test Circuit



Block Diagram and Application Circuit Example



(1*): Recommended constant value $0.0033\mu F + 470k\Omega$ (values when tested) circumstances by the user. The value of (1^*) , (2^*) , and (3^*) affects sensitivity for signal detection. It must be adjusted depending on the

- Recommended matching resistor value R1=1k Ω , R2=1k Ω
- Recommended BPF Murata SFSRA4M50DF00-B0
- (3*): Recommended constant value 4.7 μ F to 10k Ω

The ceramic capacitor may be used for the electrolytic capacitor.

Pin Functions

2 DC FILTER DC: 2.6V 14pin DC: 2.1V Absorbing the DC offset of signal line by external capacity. 3 DC FILTER IN DC: 2.4V Absorbing the DC offset of signal line by external capacity. 4 FM FILTER DC: 2.9V Filter terminal for making stable DC voltage of FM describing output in SIF part. Normally, use a condensor of 4.7μF. Increase the capacity value with concerning frequency characteristics of low level.	FIIII	unctions			
AM DETECTOR DC : 2.3V Reference terminal of AM detection. PAD VCC 2 DC FILTER 2pin DC : 2.5V 14pin DC : 2.1V Absorbing the DC offset of signal line by external capacity. 3 DC FILTER IN DC : 2.4V Absorbing the DC offset of signal line by external capacity. Absorbing the DC offset of signal line by external capacity.		Pin Name		Function	Equivalent Circuit
SIF INPUT DC: 2.4V Absorbing the DC offset of signal line by external capacity. Absorbing the DC offset of signal line by external capacity. Absorbing the DC offset of signal line by external capacity. PAD 15 PAD PAD PAD 100κΩ PAD 100κΩ PAD 1κΩ 1κΩ 1κΩ 1κΩ 1κΩ 1κΩ 1κΩ 1κ		AM DETECTOR		Reference terminal of AM detection.	VCC VCC
external capacity. 4 FM FILTER DC: 2.9V Filter terminal for making stable DC voltage of FM detection output in SIF part. Normally, use a condenser of 4.7μF. Increase the capacity value with concerning frequency characteristics of low level. 5 SIF INPUT DC: 2.4V Input terminal for SIF. The input impedance is about 5κΩ. Be care for about pattern layout of the input circuit, because of causing buzz-beat and buzz by leaking noise signal into the input terminal. (The noise signal depending on sound is			DC : 2.6V 14pin		8 4
FM detection output in SIF part. Normally, use a condenser of 4.7μF. Increase the capacity value with concerning frequency characteristics of low level. Input terminal for SIF. The input impedance is about 5kΩ. Be care for about pattern layout of the input circuit, because of causing buzz-beat and buzz by leaking noise signal into the input terminal. (The noise signal depending on sound is		DC FILTER IN	DC : 2.4V		$\begin{array}{c c} 2k\Omega & 2k\Omega \\ \hline 100k\Omega & 2k\Omega \\ \hline \end{array}$
The input impedance is about 5kΩ. Be care for about pattern layout of the input circuit, because of causing buzz-beat and buzz by leaking noise signal into the input terminal. (The noise signal depending on sound is 500Ω, 500Ω	4	FM FILTER	DC: 2.9V	FM detection output in SIF part. Normally, use a condenser of $4.7\mu F$. Increase the capacity value with concerning frequency	
particularly video signal and chroma signal and so on. VIF carrier becomes noise signal.) 6 GND			DC : 2.4V	The input impedance is about $5k\Omega$. Be care for about pattern layout of the input circuit, because of causing buzz-beat and buzz by leaking noise signal into the input terminal. (The noise signal depending on sound is particularly video signal and chroma signal and	10κΩ

Continued from preceding page DC voltage Pin Name Function **Equivalent Circuit** No. AC level JUST CLOCK Rectangle wave output for JUST CLOCK. 7 OUT (OPEN Collector) 5V 100kΩ Pull-up O PAD –₩− 5kΩ 3.0V to V_{CC} : MUTE (CONT 1) MUTE DC:0V control pin & OPEN (0.9V): NORM Distinction 0V: NORM & Detection AREA Control 50kΩ≶ CONT2 control. PAD $1 k \Omega$ Use it within the range of 0 to 0.2V when you 0operate usually. CONT1) 2.4V REG 20kΩ ≹70kΩ 50kΩ≶ 9 High: 2.5V to 5V Serial data input <mark>⇔</mark>|30μ**Α** Low: 0V to 1.5V pin. 5V PAD 500Ω 0V Serial CLK input High: 2.5V to 5V Low: 0V to 1.5V **⊋**[30μA 5V PAD 500Ω 0V TEST1 11 EXTIN_R DC: 2.4V 12 EXT input Rch ¹Vcc PAD -14.5dBV not used : OPEN 50kΩ 2.4V EXTIN_L DC: 2.4V EXT input Lch † Vcc -14.5dBV not used : OPEN 50kΩ

Continued from preceding page.

Continue	d from preceding pa	gc.		
Pin No.	Pin Name	DC voltage AC level	Function	Equivalent Circuit
16	SLAVE ADD			
	SELECT			
17	Line Out (R) terminal	DC : 2.4V AC : -4.5dBV	Line output pin.	†
18	Line Out (L) terminal			2.5pF 250Ω 300Ω PAD 2.5pF \$50kΩ
19	V _{CC} 5V			
20	MTS MODE OUT	No signal DC : 2.0V	Detection output for M.T.S. signal. BILINGUAL :3.0V MONO :2.0V STEREO :1.0V	10kΩ 10kΩ PAD 8 9 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
21	REG FILT	DC : 2.4V	Filter terminal of reference voltage source	PAD 500Ω 10kΩ 50kΩ \$10kΩ \$10kΩ
22 23 24	NC			

I²C BUS Serial Interface Specification

(1) Data Transfer Manual

This LSI adopts control method (I²C-BUS) with serial data, and controlled by two terminals which called SCL (serial clock) and SDA (serial data). At first, set up*1the condition of starting data transfer, and after that, input 8 bit data to SDA terminal with synchronized SCL terminal clock. The order of transferring is first, MSB (the Most Scale of Bit), and save the order. The 9th bit takes ACK (Acknowledge) period, during SCL terminal takes 'H', this LSI pull down the SDA terminal. After transferred the necessary data, two terminals lead to set up and of *2 data transfer stop condition, thus the transfer comes to close.

- *1 Defined by SCL rise down SDA during 'H' period.
- *2 Defined by SCL rise up SDA during 'H' period.

(2) Transfer Data Format

After transfer start condition, transfers slave address (1000 000*) to SDA terminal, control data, then, stop condition (See figure 1).

Slave address is made up of 7bits, *38th bit shows the direction of transferring data, if it is 'L' takes write mode (As this LSI side, this is input operation mode), and in case of 'H' reading mode (As this LSI side, this is output operation mode).

Data works with all of bit, transfer the stop condition before stop 8bit transfer, and to stop transfer, it will be canceled the transfer dates. At READ mode, this LSI outputs during ACK period, please must input 9 clocks.

*3 It is called R/W bit.

Fig.1 DATA STRUCTURE "WRITE" mode

START Condition	Slave Address	R/W <u>L</u>	ACK	Control data	ACK	STOP condition
-----------------	---------------	-----------------	-----	--------------	-----	----------------

Fig.2 DATA STRUCTURE "READ" mode

START condition	Slave Address	R/W <u>H</u>	ACK	Internal Data *	ACK	STOP condition
-----------------	---------------	-----------------	-----	-----------------	-----	----------------

^{*} The output data synchronizes with the clock of SCL pin. Then the ACK output is made after the output data.

bit8 is result of STERO DET (H : STEREO) bit7 is result of BILINGUAL DET (H : BILINGUAL)

bit6 is Initial Condition 'H' bit5 to bit1 are fixed to 'L'

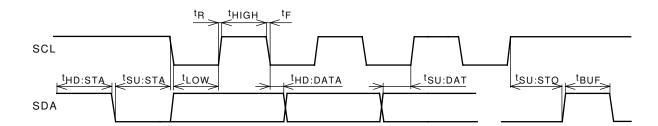
(3) Initialize

This IC is initialized for circuit protection. Initial condition is "01h (Main-mode)".

Reference

Parameter	Symbol	min	max	unit
LOW level input voltage	V _{IL}	-0.5	1.5	٧
HIGH level input voltage	V _{IH}	2.5	5.5	٧
LOW level output current	l _{OL}		3.0	mA
SCL clock frequency	fSCL	0	100	kHz
Set-up time for a repeated START condition	^t SU:STA	4.7		μs
Hold time START condition. After this period, the first clock pulse is generated	^t HD : STA	4.0		μs
LOW period of the SCL clock	tLOW	4.7		μs
Rise time of both SDA and SDL signals	t _R	0	1.0	μs
HIGH period of the SCL clock	^t HIGH	4.0		μs
Fall time of both SDA and SDL signals	tF	0	1.0	μs
Data hold time	tHD : DAT	0		μs
Data set-up time	^t SU : DAT	250		ns
Set-up time for STOP condition	^t SU:STO	4.0		μs
BUS free time between a STOP and START condition	^t BUF	4.7		μs

Definition of Timing



I²C Control/LA72715NV Group number is ONLY 1 (Normal Use).

Grp-1

	Gip i		D.O.	D.5	5.4			- D.4	0 1111
	D8	D7	D6	D5	D4	D3	D2	D1	Condition
							0	0	Bilingual
*							0	1	Main
							1	0	Sub
							1	1	(Prohibit)
*						0			Normal
						1			Forced MONO
*					0				Normal (MUTE OFF)
					1				MUTE
*				0					TV Mode (SW Normal)
				1					EXT Mode (SW EXT)
*			0						JUST CLOCK OFF
			1						JUST CLOCK ON
*		0							SIF Mode
		1							BASE BAND Mode
*	0								Fix
	1								Prohibit (TEST Mode)

^{*:} Initial condition

Read out data

11000 Cut data											
D8	D7	D6	D5	D4	D3	D2	D1	Condition			
			0	0	0	0	0	Fixed			
0								Normal			
1								Stereo det			
	0							Normal			
	1							Bilingual det			
		0						Except an initial condition			
		1						Initial condition			

Test Mode Condition

When STOP condition transform at Grp-1 data-end, controlled NORMAL mode.

Grp-2 (Only test condition: Normally, this group is hidden group)

D8	D7	D6	D5	D4	D3	D2	D1	Condition/Moniter position			
0	0	0	0	0	0	0	0	-			
0	0	0	0	0	0	0	1	TEST-01 SIF out			
0	0	0	0	0	0	1	0	TEST-02 SUB FIL out			
0	0	0	0	0	0	1	1	TEST-03 CUE FIL out			
0	0	0	0	0	1	0	0	TEST-04 SUD DET out			
0	0	0	0	0	1	0	1	TEST-05 CUE DC1 out			
0	0	0	0	0	1	1	0	TEST-06 SUB DET2 out			
0	0	0	0	0	1	1	1	TEST-07 110K out			
0	0	0	0	1	0	0	0	TEST-08 28K out			
0	0	0	0	1	0	0	1	TEST-09 CUE PLS out			
0	0	0	0	1	0	1	0	TEST-10 FIL ZAP LEVEL			

SLAVE ADDRESS 80H (16pin : OPEN) SLAVE ADDRESS 84H (16pin : V_{CC}) SLAVE ADDRESS A0H (16pin : GND)

Mode Select (pin & I²C setting)

Broadcast	MUTE PIN setting	I ² C					OUTPUT MODE			READ MODE OUT		MODE I/O
signal	8pin	D5	D4	D3	D2	D1	LCH (18pin)	RCH (17pin)	MODE	D8	D7	20pin
Bilingual	L or OPEN	0	0	0	0	0	MAIN	SUB	вотн	0	1	3V
	L or OPEN	0	0	0	0	1	MAIN	MAIN	MAIN	0	1	
	L or OPEN	0	0	0	1	0	SUB	SUB	SUB	0	1	
	L or OPEN	0	0	1	*	*	MAIN	MAIN	MONO	0	1	
	*	*	1	*	*	*	MUTE	MUTE	MUTE	0	1	
	Н	*	*	*	*	*	MUTE	MUTE	MUTE	0	1	
	L or OPEN	1	0	*	*	*	EXT L	EXT R	EXT	0	1	
STEREO	L or OPEN	0	0	0	*	*	L	R	STEREO	1	0	1V
	L or OPEN	0	0	1	*	*	L+R	L+R	MONO	1	0	
	*	*	1	*	*	*	MUTE	MUTE	MUTE	1	0	
	Н	*	*	*	*	*	MUTE	MUTE	MUTE	1	0	
	L or OPEN	1	0	*	*	*	EXT L	EXT R	EXT	1	0	
MONO	L or OPEN	0	0	*	*	*	L+R	L+R	MONO	0	0	2V
	*	*	1	*	*	*	MUTE	MUTE	MUTE	0	0	
	Н	*	*	*	*	*	MUTE	MUTE	MUTE	0	0	
	L or OPEN	1	0	*	*	*	EXT L	EXT R	EXT	0	0	

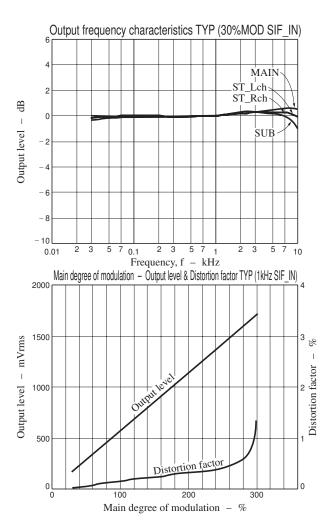
16pin : Slave address select. 0V to 1.5V : A0H, OPEN : 80H, 3.0V to V_{CC} : 84H

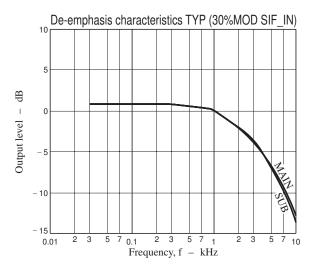
Serial Data Specification (I²C bus communication)

		•									
Data bit											
MSB							LSB				
D8	D7	D6	D5	D4	D3	D2	D1				
TEST	SIF or BASE BAND	JUST CLK	EXT SOURCE SELECT	NORMAL OUT MUTE	Forced MONO	Bilingual mode select					
<u>0 : OFF</u> 1 : ON	<u>0 : SIF</u> 1 : BASE BAND	<u>0 : OFF</u> 1 : ON	0 : OFF(TV) 1 : EXT	<u>0 : OFF</u> 1 : ON	<u>0 : OFF</u> 1 : ON						

Note: Underline shows default setting

LA72715NV Reference Characteristics





ON Semiconductor and the ON logo are registered trademarks of Semiconductor Components Industries, LLC (SCILLC). SCILLC owns the rights to a number of patents, trademarks, copyrights, trade secrets, and other intellectual property. A listing of SCILLC's product/patent coverage may be accessed at www.onsemi.com/site/pdf/Patent-Marking.pdf. SCILLC reserves the right to make changes without further notice to any products herein. SCILLC makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does SCILLC assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. "Typical" parameters which may be provided in SCILLC data sheets and/or specifications can and do vary in different applications and actual performance may vary over time. All operating parameters, including "Typicals" must be validated for each customer application by customer's technical experts. SCILLC does not convey any license under its patent rights nor the rights of others. SCILLC products are not designed, intended, or authorized for use as components in systems intended for surgical implant into the body, or other applications intended to support or sustain life, or for any other application in which the failure of the SCILLC product could create a situation where personal injury or death may occur. Should Buyer purchase or use SCILLC products for any such unintended or unauthorized application, Buyer shall indemnify and hold SCILLC and its officers, employees, subsidiaries, affiliates, and distributors harmless against all claims, costs, damages, and expenses, and reasonable attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized use, even if such claim alleges that SCILLC was negligent regarding the design or manufacture of the part. SCILLC is an Equa