Ordering number : ENA2242

LC898212XD

CMOS LSI

AF Controller

ON Semiconductor®

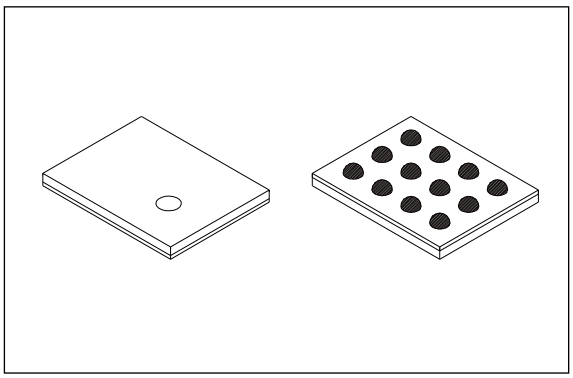
http://onsemi.com

Overview

This LSI is AF control LSI. It consists of 1 system of feed back circuit for AF control.

Features

- Built-in equalizer circuit using digital operation
  - AF control equalize circuit
  - Any coefficient can be specified by I^2C I/F
- I^2C Interface
- Built-in A/D converter
  - Maximum 10-bit
  - Input 2 channel
- Built-in D/A converter
  - 8-bit
  - Output 2-channel (Hall offset, Constant current Bias)
- Built-in OP Amp
  - 1 channel
  - Hall Amp
- Built-in OSC
  - 48MHz (Frequency adjustment function)
- Built-in PWM pulse generator circuit
  - PWM circuit for AF control
- 1-chip motor driver
  - Saturation drive H bridge 1 channel
- Package
  - WL-CSP 12-pin
  - Lead-free, halogen-free
- Supply voltage
  - Logic unit : Internal core typ 1.2V, AVDD (2.6V to 3.6V)
  - Driver unit : VM (2.6V to 3.6V)



WLP12J(1.77X1.37)

* I^2C Bus is a trademark of Philips Corporation.

ORDERING INFORMATION

See detailed ordering and shipping information on page 4 of this data sheet.

Semiconductor Components Industries, LLC, 2013

Pin Description

TYPE					
I	INPUT	P	Power supply, GND	NC	NOT CONNECT
O	OUTPUT				
B	BIDIRECTION				

■ I^2C interface

I2CCK	B	I^2C Clock pin
I2CDT	B	I^2C Data pin

■D/A interface

BIASO	O	D/A output (Hall bias input)

■Op-Amp interface

OPINP	I	Op-Amp input
OPINM	I	Op-Amp input

■Driver interface

OUT1	O	Actuator output pin
OUT2	O	Actuator output pin

■Power supply pin

VDD	P	Digital power supply
VSS	P	Digital GND
VDDO	P	LDO power supply out
VM	P	Motor power supply
PGND	P	Power GND

PIN TYPE “O” – Ensure that it is set to OPEN.
PIN TYPE “I” – OPEN is inhibited. Ensure that it is connected to the V_{DD} or V_{SS} even when it is unused.
(Please contact our company for more information about selection of V_{DD} or V_{SS}.)
PIN TYPE “B” – If you are unsure about processing method on the pin description of pin layout table, please contact us.

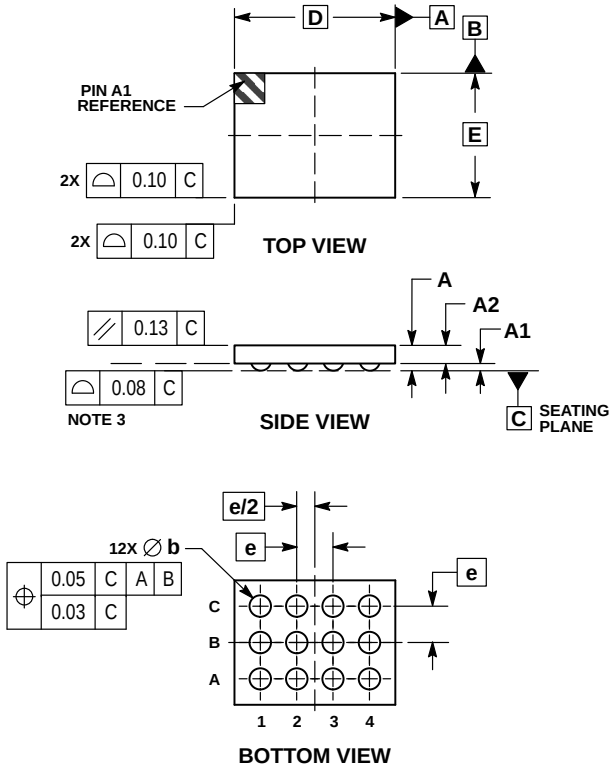
Note that incorrect processing of unused pins may result in defects.
If you have any question, please feel free to contact us.

Package Dimensions

WLP12J(1.77X1.37)

unit : mm

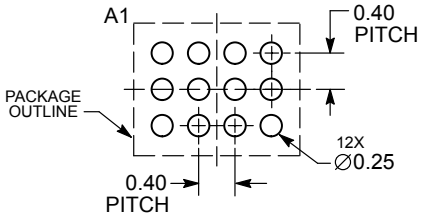
WLCSP12, 1.77x1.37
CASE 567GH
ISSUE O



NOTES:
1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. COPLANARITY APPLIES TO THE SPHERICAL CROWNS OF THE SOLDER BALLS.

	MILLIMETERS	
DIM	MIN	MAX
A	---	0.33
A1	0.03	0.13
A2	0.20 REF	
b	0.15	0.25
D	1.77 BSC	
E	1.37 BSC	
e	0.40 BSC	

RECOMMENDED SOLDERING FOOTPRINT*



DIMENSIONS: MILLIMETERS

*For additional information on our Pb−Free strategy and soldering details, please download the ON Semiconductor Soldering and Mounting Techniques Reference Manual, SOLDERRM/D.

ORDERING INFORMATION

Device	Package	Shipping (Qty / Packing)
LC898212XD-SH	WLP12J(1.77X1.37) (Pb-Free / Halogen Free)	5000 / Tape & Reel

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