



ON Semiconductor®

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LC898213XC

Advance Information

CMOS LSI

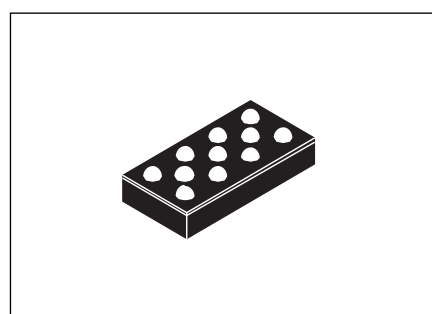
AF Controller

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 I²C I/F
- I²C 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 Hall Sensor
 - Si Hall sensor
- Built-in VGA
 - 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 11-pin
 - Lead-free, halogen-free
- Supply voltage
 - Logic unit : Internal core (1.7V to 1.98V), AVDD (2.6V to 3.6V)
 - Driver unit : VM (2.6V to 3.6V)



WLCSP11, 1.10x2.20

* I²C Bus is a trademark of Philips Corporation.

This document contains information on a new product. Specifications and information herein are subject to change without notice.

ORDERING INFORMATION

See detailed ordering and shipping information on page 5 of this data sheet.

Pin Description

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

■ I²C interface

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

■ Hall interface

HALL	O	Hall amp output
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■ 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

■ Test pin

TEST	O	Test pin
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*Process when pins are not used

PIN TYPE “O” – Ensure that it is set to OPEN.

PIN TYPE “I” – OPEN is inhibited. Ensure that it is connected to the Vdd or Vss even when it is unused.

(Please contact ON Semiconductor company for more information about selection of Vdd or Vss.)

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.

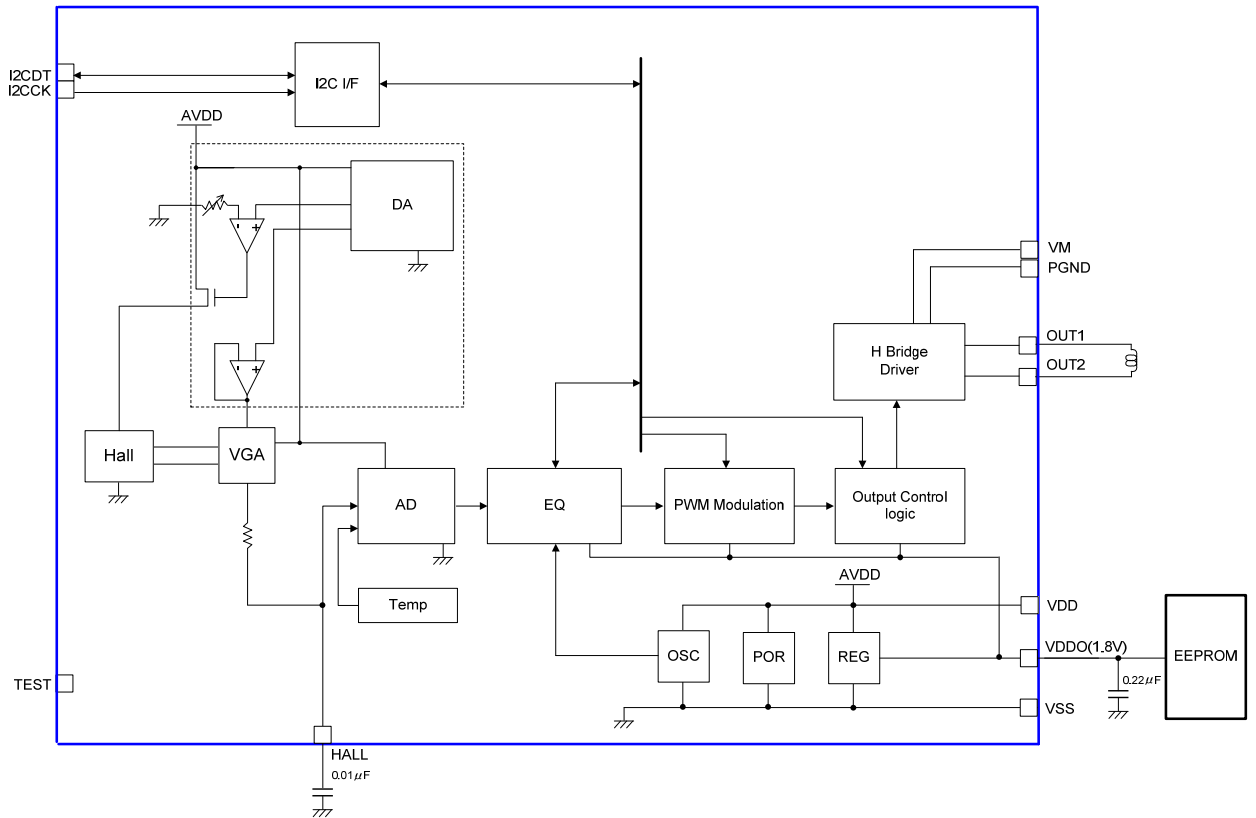
Pin Layout

Circuit Name	Number of Pins	Circuit Name	Number of Pins
Analog	5	Driver	4
Logic	2		

Backside pin layout diagram (Top View from the mold side)

7	TEST		HALL
6		I2CDT	
5	VSS		VDD
4		I2CCK	
3	VM		VDDO
2		OUT1	
1	OUT2		PGND
	A	B	C

Block Diagram



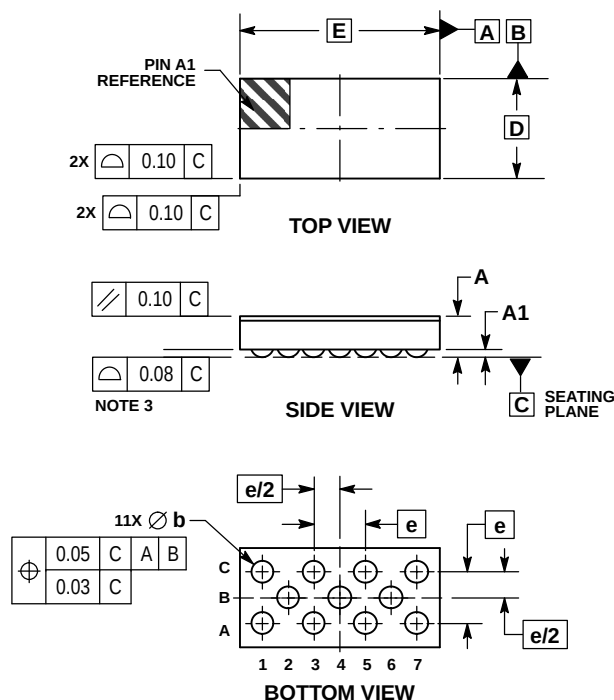
Package Dimensions

unit : mm

WLCSP11, 1.10x2.20

CASE 567HP

ISSUE 0

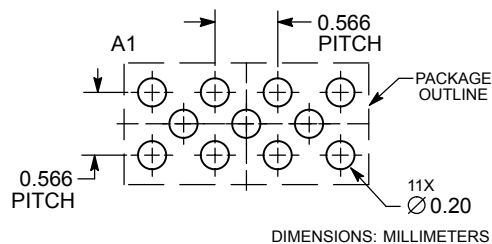


NOTES:

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

DIM	MILLIMETERS	
	MIN	MAX
A	---	0.45
A1	0.03	0.13
b	0.15	0.25
D	1.10 BSC	
E	2.20 BSC	
e	0.566 BSC	

RECOMMENDED SOLDERING FOOTPRINT*



*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)
LC898213XC-MH	WLP11(2.20X1.10) (Pb-Free / Halogen Free)	5000 / Tape & Reel

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