# LC898215XA

### **CMOS LSI**

# **AF(Auto Focus) Control LSI**



http://onsemi.com

#### Overview

The LC898215 is a focus control LSI for cellphone/smartphone camera modules. It controls pre-loaded type actuators. The LSI is composed of a fast settling time circuit and a driver circuit to enable the control.

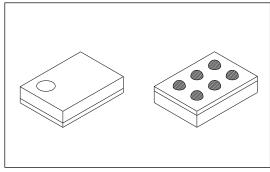
The fast settling time circuit features the high speed movement completion of the actuator.

Pre-loaded type actuators have unintentional oscillation by resonance frequency due to their structures while moving with step signal type current change, and it may interfere with the accurate focus control.

This LSI's fast settling time circuit permits optimum control of the current change. It enables high speed movement completion of the actuator so that the circuit will be an effective function for configuring high speed focus control systems.

#### **Function**

- Built-in Fast Settling Time Circuit.
- I<sup>2</sup>C Interface
- 1.8V tolerant
- Built-in Power On Reset
- Built-in OSC
- 40 MHz
- Built-in LDO
- 1.5V for Logic unit
- Built-in PWM pulse generator circuit
- PWM circuit for AF control
- 1-chip motor driver
- Saturation drive 1 channel
- IO max 100mA
- Package
- WL-CSP 6 pin
- Pb-free, Halogen Free
- Supply voltage
- VM (2.6 to 3.6 V)



WLP6(1.29X0.80)

## **ORDERING INFORMATION**

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

<sup>\*</sup> I<sup>2</sup>C Bus is a trademark of Philips Corporation.

# LC898215XA

# **Pin Description**

■ I<sup>2</sup>C interface

I2CCK B I<sup>2</sup>C Clock pin
I2CDT B I<sup>2</sup>C Data pin

■ Driver interface

OUT1 O Actuator output pin

ENA/OUT2 B LSI enable / Actuator output pin

■ Power supply pin

VDD Power supply

GND P GND

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

PIN TYPE "I" – OPEN is inhibited. Ensure that it is connected to the  $V_{\mbox{\scriptsize DD}}$  or  $V_{\mbox{\scriptsize SS}}$  even when it is unused.

(Please contact our company. for more information about selection of  $V_{\mbox{DD}}$  or  $V_{\mbox{SS}}$ .)

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.

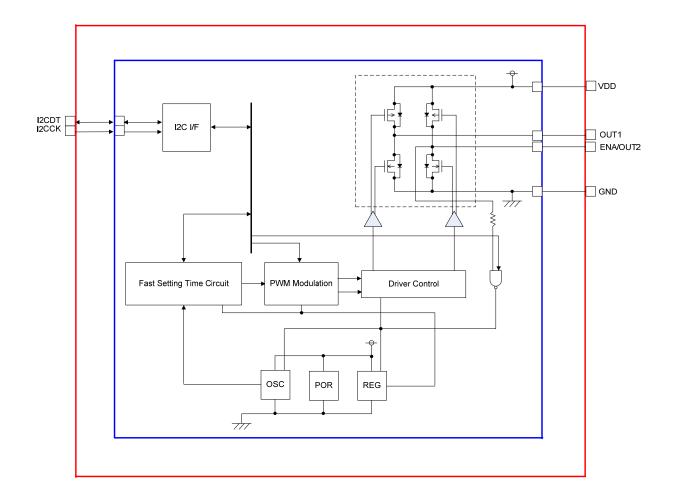
# **Pin Layout**

| Circuit Name | Number of Pins |
|--------------|----------------|
| Analog       | 4              |
| Logic        | 2              |

Pin layout diagram: Top View (Ball Side Down)

| 1 | OUT1 | ENA/<br>OUT2 |
|---|------|--------------|
| 2 | GND  | I2CDT        |
| 3 | VDD  | I2CCK        |
|   | В    | Α            |

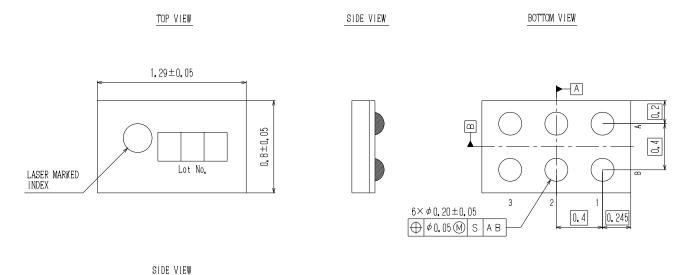
# **Block Diagram**

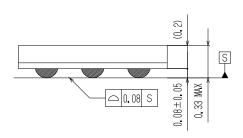


### PACKAGE DIMENSIONS

WLP6(1.29X0.80)

unit: mm





### ORDERING INFORMATION

| Device        | Package                                     | Shipping (Qty / Packing) |
|---------------|---|--------------------------|
| LC898215XA-MH | WLP6(1.29X0.80)<br>(Pb-Free / Halogen Free) | 5000 / Tape & Reel       |

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