

## Product Overview

### LC898124EP1XC: Optical Image Stabilization (OIS) / Open-Auto Focus (AF) Controller & Driver integrating an on-chip 32-bit DSP

For complete documentation, see the data sheet.

LC898124EP1XC is a system LSI integrating an on-chip 32-bit DSP, a EEPROM and peripherals including analog circuits for Optical Image Stabilization (OIS) / Auto Focus (AF) control and constant current drivers.

#### Features

- On-chip 32-bit DSP : Built-in software for digital servo filter  
Built-in software for Gyro filter
- Memory : EEPROM / ROM / SRAM
- Peripherals : AD converter : input 4-ch DA converter : Output 2-ch 2-wire Serial I/F circuit (with clock stretch function)  
Hall Bias circuit x2-ch Hall Amp x2-ch OSC (Oscillator)  
LDO (Low Drop-Out regulator)  
Digital Gyro I/F for various types of gyro (SPI Bus)  
Interrupt I/F
- Driver OIS : Constant current linear driver (x2-ch,  $I_{full} = 160$  mA)  
OP-AF (bidirection) : Constant current linear driver (x1-ch,  $I_{full} = 130$  mA)
- Power supply voltage AD / DA / VGA / LDO / OSC : AVDD30 = 2.6 V to 3.3 V  
Driver : VM = 2.6 V to 3.3 V

#### Applications

- OIS / AF Camera Module

#### Benefits

- The onchip DSP allows the OIS algorithm to be flexible and achieve the high OIS performance. Command decoder can be implemented, which is demanded mainly by China customers.
- The Onchip EEPROM allows to store the calibration data and DSP program.

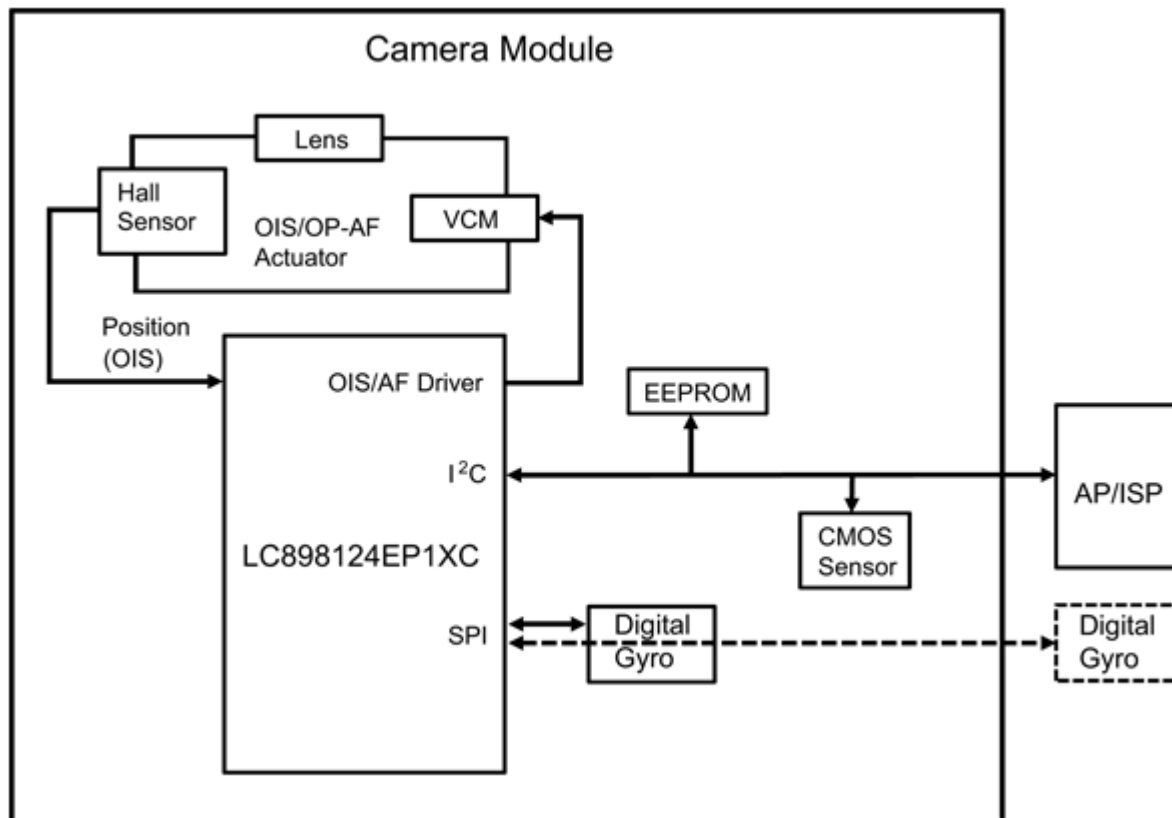
#### End Products

- Smart Phones
- Tablets

### Part Electrical Specifications

Product	Compliance	Status	Phase	$V_M$ Min (V)	$V_M$ Max (V)	$V_{CC}$ Min (V)	$V_{CC}$ Max (V)	$I_O$ Max (A)	$I_O$ Peak Max (A)	Control Type	Package Type
LC898124EP1XC-MH	Pb-free	Active		2.6	3.3	2.6	3.3	0.16/0.13		Serial	WLCSP-27
	Halide free										

# Application Diagram



For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

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