

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

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.

Applications

- OIS / AF Camera Module

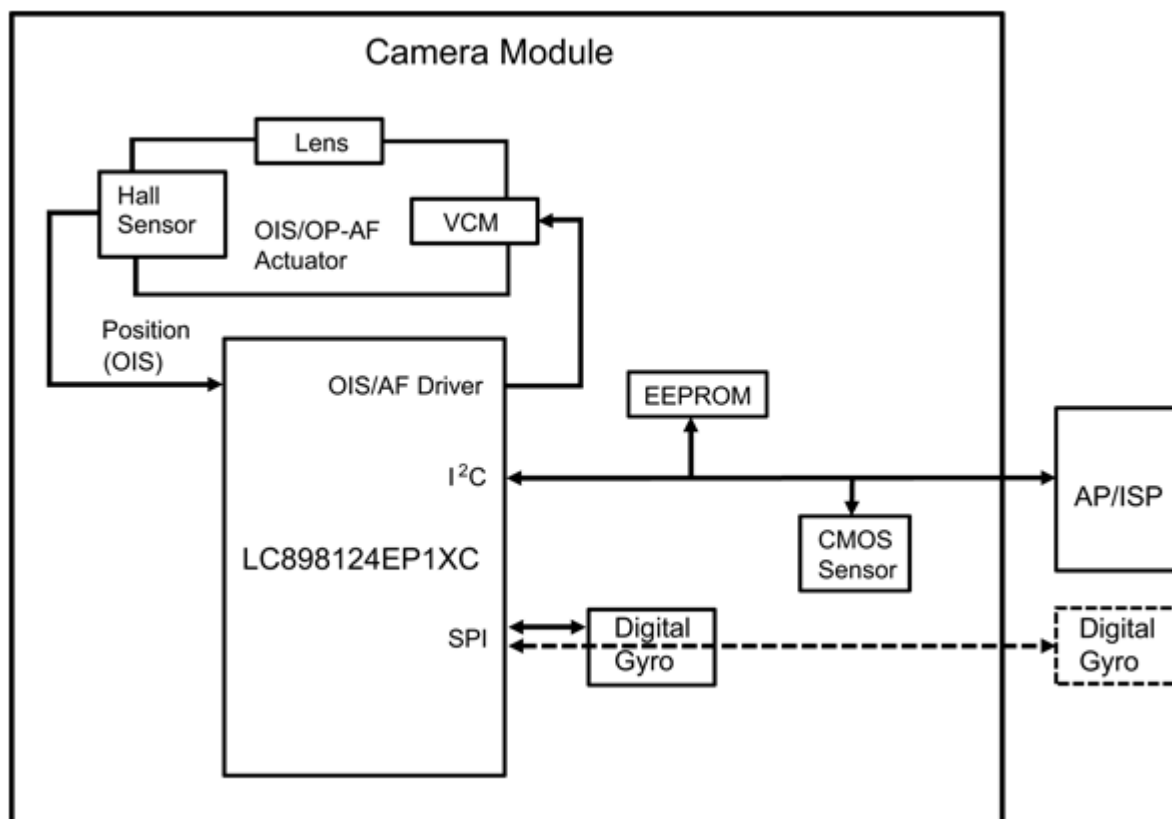
End Products

- 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 Halide free	Active		2.6	3.3	2.6	3.3	0.16/0.13		Serial	WLCSP-27

Application Diagram



For more information please contact your local sales support at www.onsemi.com.

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