

# LTC6909IMS#PBF

Data Sheet

Timer, Oscillator & Pulse Generator IC, Multiphase, Spread Spectrum, 6.67 MHz, 2.7V to 5.5V, MSOP-16

Manufacturers <u>Analog Devices, Inc</u>

Package/Case 16-TFSOP

Product Type Clock & Timer ICs

RoHS Pb-free Halide free

Lifecycle



Images are for reference only

Please submit RFQ for LTC6909IMS#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

The LTC6909 is an easy to use precision oscillator that can provide 1-, 2-, 3-, 4-, 5-, 6-, 7- or 8-phase synchronized outputs. The LTC6909 also offers spread spectrum frequency modulation (SSFM), which can be enabled to improve electromagnetic compatibility (EMC) performance.

Eight separate outputs provide up to eight rail-to-rail, 50% duty cycle clock signals. Using three logic inputs, the outputs are configured for phase separation, ranging from 45° to 120° (three to eight phases). The clock outputs can also be held low or configured for Hi-Z. A single resistor, combined with the phase configuration, sets the output frequency, based on the following formula:

The LTC6909 can be used in applications requiring only one or two output phases. Alternatively, the LTC6908 family of parts provides the same two output signals but in a smaller SOT-23 or  $2mm \times 3mm$  DFN package. The LTC6908-1 provides complimentary ( $180^{\circ}$ ) outputs while the LTC6908-2 provides quadrature ( $90^{\circ}$ ) outputs.

## **Features**

1-, 2-, 3-, 4-, 5-, 6-, 7- or 8-Phase Outputs

One External Resistor Sets the Output Frequency from 12.5kHz to 6.67MHz

Optional Spread Spectrum Frequency for Improved EMI Performance

Outputs Can Be Held Low or Floated (Hi-Z)

Three Spread Spectrum Modulation Rates fOUT/16, fOUT/32 and fOUT/64

400μA Supply Current

Operates from a Single 2.7V to 5.5V Supply

Fast Start-Up Time

First Cycle Accurate

Outputs Are High Impedance Until Frequency Settles

MS16 Package

#### **Related Products**



### LTC6957HMS-3#PBF

Analog Devices, Inc MSOP-12



### LTC1799CS5#TRMPBF

Analog Devices, Inc TSOT23



#### LTC1799CS5#TRPBF

Analog Devices, Inc SMD5



## LTC6906CS6

Analog Devices, Inc SOT-23

# **Application**

Synchronizing Multiple Switching Power Supplies



### LTC6994IS6-2#TRMPBF

Analog Devices, Inc SOT-6



#### LTC6902IMS#PBF

Analog Devices, Inc MSOP10



### LTC6906CS6#TRMPBF

Analog Devices, Inc SOT23



### **LTC1799IS5**

Analog Devices, Inc SOT23-5