
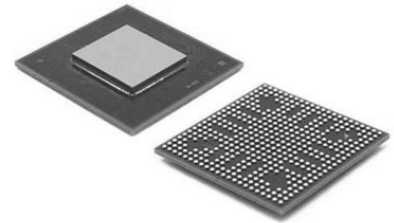


## Clock Fanout Buffer 4-OUT 1-IN 1:4 24-Pin LFCSP EP Tray

<b>Manufacturer:</b>	<a href="#">Analog Devices, Inc</a>
<b>Package/Case:</b>	LFCSP-24
<b>Product Type:</b>	Drivers
<b>RoHS:</b>	RoHS Compliant/Lead free 
<b>Lifecycle:</b>	Active



Images are for reference only

[Inquiry](#)

### General Description

The AD9508 provides clock fanout capability in a design that emphasizes low jitter to maximize system performance. This device benefits applications like clocking data converters with demanding phase noise and low jitter requirements.

There are four independent differential clock outputs, each with various types of logic levels available. Available logic types include LVDS (1.65 GHz), HSTL (1.65 GHz), and 1.8 V CMOS (250 MHz). In 1.8 V CMOS output mode, the differential output becomes two CMOS single-ended signals. The CMOS outputs are 1.8 V logic levels, regardless of the operating supply voltage.

Each output has a programmable divider that can be bypassed or be set to divide by any integer up to 1024. In addition, the AD9508 supports a coarse output phase adjustment between the outputs.

The device can also be pin programmed for various fixed configurations at power-up without the need for SPI or I2C programming.

The AD9508 is available in a 24-lead LFCSP and operates from either a single 2.5 V or 3.3 V supply. The temperature range is -40°C to +85°C.

## Key Features

1.65 GHz differential clock inputs/outputs

10-bit programmable dividers, 1 to 1024, all integers

Up to 4 differential outputs or 8 CMOS outputs

Pin strapping capability for hardwired programming at power-up

Additive output jitter: 41 fs rms typical (12 kHz to 20 MHz)

Excellent output-to-output isolation

Automatic synchronization of all outputs

Single 2.5 V/3.3 V power supply

Internal LDO (low drop-out) voltage regulator for enhanced power supply immunity

Phase offset select for output-to-output coarse delay adjust

3 programmable output logic levels, LVDS, HSTL, and CMOS

Serial control port (SPI/I2C) or pin-programmable mode

Space-saving 24-lead LFCSP

AD9508-EP supports defense and aerospace applications (AQEC standard)

[Download \(pdf\)](#)

Extended temperature range: -55°C to +105°C

Controlled manufacturing baseline

One assembly/test site

One fabrication site

Enhanced product change notification

Qualification data available on request

V62/13626 DSCC Drawing Number

## Application

Low jitter, low phase noise clock distribution

Clocking high speed ADCs, DACs, DDSs, DDCs, DUCs, MxFEs

High performance wireless transceivers

High performance instrumentation

Broadband infrastructure

## Recommended For You

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### AD9517-3ABCPZ

Analog Devices, Inc

QFN

### AD9954YSV

Analog Devices, Inc

QFP

### ADCLK914BCPZ-WP

Analog Devices, Inc

LFCSP-16

### AD7008JP50

Analog Devices, Inc

PLCC44

### AD9952YSV

Analog Devices, Inc

QFP

### AD9516-3BCPZ

Analog Devices, Inc

QFN

**ADCLK944BCPZ-R2**

Analog Devices, Inc

LFCSP16

**AD9577BCPZ**

Analog Devices, Inc

LFCSP-40

**AD9543BCPZ**

Analog Devices, Inc

LFCSP-48

**AD9853AS**

Analog Devices, Inc

QFP

**ADN2805ACPZ**

Analog Devices, Inc

LFCSP

**AD9515BCPZ-REEL7**

Analog Devices, Inc

LFCSP-32

**ADN2807ACPZ**

Analog Devices, Inc

48-LFCSP

**AD9520-4BCPZ**

Analog Devices, Inc

LFCSP

**AD9831AST**

Analog Devices, Inc

QFP