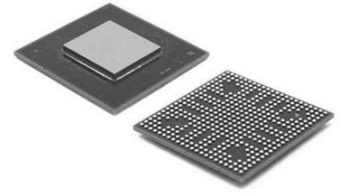


Clock Generator 0MHz to 1.6GHz-IN 800MHz-OUT 32-Pin LFCSP EP Tray



Images are for reference only

Manufacturer: [Analog Devices, Inc](#)

Package/Case: LFCSP32

Product Type: Clock & Timer ICs

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

[Inquiry](#)

General Description

The AD9513 features a three-output clock distribution IC in a design that emphasizes low jitter and phase noise to maximize data converter performance. Other applications with demanding phase noise and jitter requirements also benefit from this part.

There are three independent clock outputs that can be set to either LVDS or CMOS levels. These outputs operate to 800 MHz in LVDS mode and to 250 MHz in CMOS mode.

Each output has a programmable divider that can be set to divide by a selected set of integers ranging from 1 to 32. The phase of one clock output relative to the other clock output can be set by means of a divider phase select function that serves as a coarse timing adjustment.

One of the outputs features a delay element with three selectable full-scale delay values (1.5 ns, 5 ns, and 10 ns), each with 16 steps of fine adjustment.

The AD9513 does not require an external controller for operation or setup. The device is programmed by means of 11 pins (S0 to S10) using 4-level logic. The programming pins are internally biased to $\frac{1}{2}$ VS. The VREF pin provides a level of $\frac{2}{3}$ VS. VS (3.3 V) and GND (0 V) provide the other two logic levels.

The AD9513 is ideally suited for data converter clocking applications where maximum converter performance is achieved by encode signals with subpicosecond jitter.

The AD9513 is available in a 32-lead LFCSP and operates from a single 3.3 V supply. The temperature range is -40°C to $+85^{\circ}\text{C}$.

Key Features

Phase select for coarse delay adjust

Device configured with 4-level logic pins

Time delays up to 11.6 ns

Divide-by in range from 1 to 32

1.6 GHz Differential clock input

3 Programmable dividers

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

ATE

Recommended For You

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