


Zero Delay Buffer 5-Out Single-Ended 8-Pin TSSOP T/R

Manufacturer:	Texas Instruments, Inc
Package/Case:	TSSOP8
Product Type:	Clock & Timer ICs
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active

CDCVF2505PWR Image

Images are for reference only

[Inquiry](#)

General Description

The CDCVF2505 is a high-performance, low-skew, low-jitter, phase-lock loop (PLL) clock driver. This device uses a PLL to precisely align the output clocks (1Y[0-3] and CLKOUT) to the input clock signal (CLKIN) in both frequency and phase. The CDCVF2505 operates at 3.3 V and also provides integrated series-damping resistors that make it ideal for driving point-to-point loads.

One bank of five outputs provides low-skew, low-jitter copies of CLKIN. Output duty cycles are adjusted to 50 percent, independent of duty cycle at CLKIN.

The device automatically goes into power-down mode when no input signal is applied to CLKIN.

The loop filter for the PLLs is included on-chip. This minimizes the component count, space, and cost.

The CDCVF2505 is characterized for operation from -40°C to 85°C.

Because it is based on the PLL circuitry, the CDCVF2505 requires a stabilization time to achieve phase lock of the feedback signal to the reference signal. This stabilization is required following power up and application of a fixed-frequency, fixed-phase signal at CLKIN, and following any changes to the PLL reference.

Key Features

Phase-Lock Loop Clock Driver for Synchronous DRAM and General-Purpose Applications

Spread Spectrum Clock Compatible

Operating Frequency: 24 MHz to 200 MHz

Low Jitter (Cycle-to-Cycle): < |150 ps| (Over 66 MHz to 200 MHz Range)

Distributes One Clock Input to One Bank of Five Outputs (CLKOUT Used to Tune the Input-Output Delay)

Three-States Outputs When There Is No Input Clock

Operates From Single 3.3-V Supply

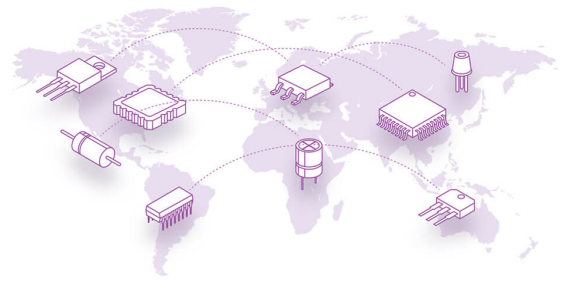
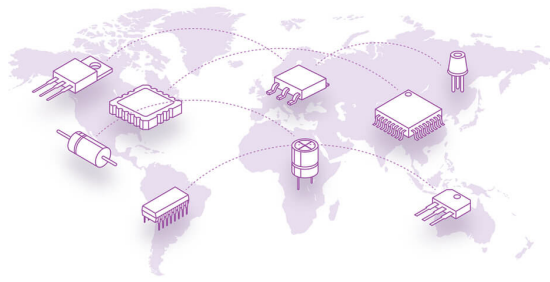
Available in 8-Pin TSSOP and 8-Pin SOIC Packages

Consumes Less Than 100 mA (Typical) in Power-Down Mode

Internal Feedback Loop Is Used to Synchronize the Outputs to the Input Clock

25-Ω On-Chip Series Damping Resistors

Integrated RC PLL Loop Filter Eliminates the Need for External Components



Recommended For You

CD4541BE

Texas Instruments, Inc

DIP14

CDCV304PW

Texas Instruments, Inc

TSSOP8

CDCV857ADGGR

Texas Instruments, Inc

TSSOP48

CDCV304PWR

Texas Instruments, Inc

TSSOP8

CDCE937PW

Texas Instruments, Inc

TSSOP20

CDCVF2310PWR

Texas Instruments, Inc

TSSOP24

CDCE62002RHBT

Texas Instruments, Inc

VQFN-32

CDCLVP110VF

Texas Instruments, Inc

QFP32

CDCLVD110ARHBT

Texas Instruments, Inc

VQFN-32

CDCDB803RSLR

Texas Instruments, Inc

VQFN-48

CDCP1803RGET

Texas Instruments, Inc

VQFN-24

CDCEL925PW

Texas Instruments, Inc

TSSOP16

CDCLVC1102PW

Texas Instruments, Inc

TSSOP8

CDCLVD1212RHAR

Texas Instruments, Inc

VQFN40

CDCVF2310PW

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TSSOP