

F100311

Low Skew 1:9 Differential Clock Driver

General Description

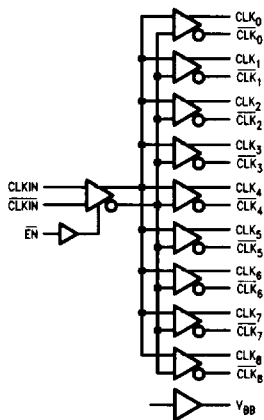
The F100311 contains nine low skew differential drivers, designed for generation of multiple, minimum skew differential clocks from a single differential input (CLKIN, $\overline{\text{CLKIN}}$). If a single-ended input is desired, the V_{BB} output pin may be used to drive the remaining input line. A HIGH on the enable pin ($\overline{\text{EN}}$) will force a LOW on all of the CLK_n outputs and a HIGH on all of the $\overline{\text{CLK}}_n$ output pins. A LOW on $\overline{\text{EN}}$ will return control of the $\text{CLK}_n/\overline{\text{CLK}}_n$ outputs back to the CLKIN/ $\overline{\text{CLKIN}}$ inputs.

The skew specifications on the F100311 are fully tested and guaranteed.

Features

- Low output to output skew (≤ 75 ps)
- 2000V ESD protection
- 1:9 low skew clock driver
- Differential inputs and outputs

Logic Symbol



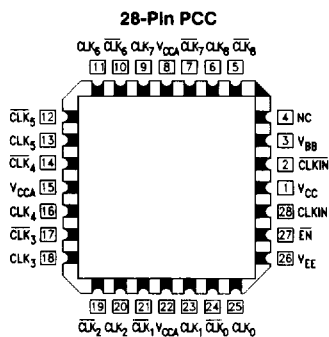
TL/F/10648-1

| Pin Names | Description |
|---|----------------------------|
| CLKIN, $\overline{\text{CLKIN}}$ | Differential Clock Inputs |
| $\overline{\text{EN}}$ | Enable |
| $\text{CLK}_{0-8}, \overline{\text{CLK}}_{0-8}$ | Differential Clock Outputs |
| V_{BB} | V_{BB} Output |
| NC | No Connect |

Truth Table

| CLKIN | $\overline{\text{CLKIN}}$ | $\overline{\text{EN}}$ | CLK_n | $\overline{\text{CLK}}_n$ |
|-------|---------------------------|------------------------|----------------|---------------------------|
| L | H | L | L | H |
| H | L | L | H | L |
| X | X | H | L | H |

Connection Diagram



TL/F/10648-2