Mixed-Signal Excellence

MXL-PLL-MIPI-PXL

Features:

- All output programmable dividers produce 50% duty cycle for both even and odd divisors
- High performance, highly programmable MIPI Pixel PLL
- Digital CMOS process
- Low power dissipation
- No external components required
- High frequency, low jitter output
- Three programmable output frequencies
- Glitch-free transition outputs
- Wide input frequency range
- Integrated Lock detector
- Full power-down mode
- Buffered programmable dividers

General Description:

The MXL-PLL-MIPI-PXL is a high performance PLL based frequency synthesizer implemented using digital CMOS technology. It is highly integrated and requires no external components. Differential circuit techniques are employed to attain low jitter in the noisy environment typical of multi-million gates digital chip.

The circuit is designed in a modular fashion and desensitized to process variations. This facilitates process migration, and results in a robust design. The MXL-PLL-MIPI-PXL incorporates a Lock Detector, three programmable output dividers, and supports a full-power down mode.

Block Diagram:

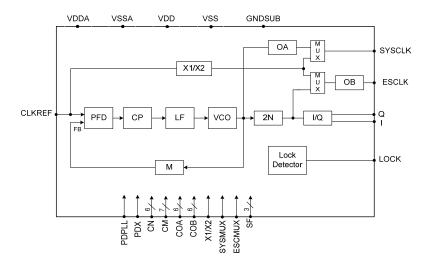


Figure 1: PLL block diagram