

General Description

PLL-18 is a 0.18um low-voltage, single-chip PLL macro with integrated loop filter. The loop filter does not need any external components. This PLL macro is designed to be fabricated in a 0.18u CMOS digital process without need for MIM capacitors.

The macro-block comprises the following sub-blocks: phase detector, voltage-controlled oscillator, charge pump and a built-in loop filter.

Features

- Power Supply: 1.2V ~ 3.3V
- Input Frequency Range: 10MHz ~ 150MHz
- Output Frequency Range: 20MHz ~ 1500MHz
- Cycle Jitter: < 200ps max
- Supply Current: 2mA ~ 15mA
- Operating Temperature Range: 0°C - 125°C
- Phase Lock Time: < 100us
- Power-down mode
- Process Technology: 0.13um, 0.18um, 0.25um, 0.35um

**Spectrum can be included*

Block Diagram

