

## PLL Leaflet

# Analog-PLL For Spread Spectrum Clock

### Key Features

- Including Loop-filter
- VCO operating range : 2000MHz - 4300MHz
- Output frequency range : 500MHz - 4300MHz
- Input frequency range : 10MHz - 200MHz
- Multiplying  
 Output frequency / Input frequency : 2.5 - 430
- Fractional multiplying available
- SSC function available
  - Modulation frequency : 20kHz - 60kHz
  - Modulation depth: -1% --- -6% down spread  
+/-0.5% --- +/-3% center spread
- Divider
  - 33-bit feedback divider
  - 3-bit input divider
- Power-down Mode

### Technology

Process : TSMC 7n

Available metallization: 1P13M\_1X\_h\_1Xa\_v\_1Ya\_h\_5Y\_vhvhv\_2Yy2R and  
1P9M\_2X\_hv\_1Ya\_h\_3Y\_vhv\_2Z

### Operating Condition

Parameter		Min	Max	Unit
Operating Voltage (AVDD)		1.6	1.98	V
Operating Voltage (VDD)		0.675	0.825	V
Junction Temperature		-40	125	°C
Input Clock	Duty	20	80	%
	Rise / Fall time	-	0.2	ns