

## IP Leaflet

# Analog-PLL For Spread Spectrum Clock

### Key Features

- Including Loop-filter
- VCO operating range : 3000MHz - 6200MHz
- Output frequency range: 750MHz - 3100MHz
- Input frequency range: 10MHz - 200MHz
- Multiplying  
Output frequency / Input frequency : 3.75 - 620
- Fractional multiplying available
- SSC function available
  - Modulation frequency: 20kHz - 60kHz
  - Modulation depth: -1% - -6% down spread  
+/-0.5% - +/-3% center spread
- Divider
  - 34-bit feedback divider
  - 3-bit input divider
- Power-down Mode

### TECHNOLOGY

Process : TSMC N3E

Available metallization: 1P15M\_1Xa1Xb1Xc1Xd1Ya1Yb4Y2Yy2Z and  
1P14M\_1Xa1Xb1Xc1Xd1Ya1Yb3Y2Yy2Z

### OPERATING CONDITION

Parameter		Min	Max	Unit
Operating Voltage (AVDD)		1.05	1.32	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

CTPD-24-021

© 2024 Renesas Electronics Corporation. All rights reserved.