

# Analog IP Cell

## Low Power 32 kHz Oscillator

### OSC\_32kHz – XFAB XH018

#### General Description

This cell is a low power RC-oscillator with a nominal frequency of 32 kHz.

#### Ratings, Parameters and Conditions

Absolute Maximum Ratings						
Parameter / Condition	Symbol	Min	Typ	Max	Unit	Comment
Operating Temperature	T <sub>OP</sub>	-40		120	°C	
Supply Voltage	V <sub>DD</sub>	-0.3		2.0	V	
Input Voltage	V <sub>IN</sub>	-0.3		V <sub>DD</sub> +0.7	V	
Output Voltage	V <sub>OUT</sub>	-0.3		V <sub>DD</sub> +0.7	V	

Electrical Parameters						
Parameter / Condition	Symbol	Min	Typ	Max	Unit	Comment
Operating Temperature	T <sub>OP</sub>	-40		85	°C	
Supply Voltage	V <sub>DD</sub>	1.6	1.8	2.0	V	
Current Consumption	I <sub>DD</sub>		1.5	2	µA	
Clock Frequency	f <sub>CLK</sub>	29		39	kHz	
Startup Time	T <sub>SU</sub>			2	µs	

#### Interface and Symbol

IO-Description		
Interface	I/O	Function
NPOR	input	enable (power on reset)
WUPCLK	output	clock output
VDD18, VSS	power	supply voltage

