Si Time [®]	Title:	Performance Report SiT2020B, 18.432MHz		
	Туре:	Performance report Rev: 1.0		1.0
	Orig:		Date:	Nov 21, 2014

This report contains sample performance data for SiT2020B-18.432MHz.

Conditions:

- Frequency 18.432 MHz
- Vdd 1.8V, 2.5V, 2.8V, 3.0V, 3.3V
- Temperature 25℃
- Termination:
 - No load for IDD
 - $\circ~~50\Omega$ to GND for phase noise
 - $\circ \quad 15 pF \text{ for other tests} \quad$

Equipment:

- Agilent DSA90604 oscilloscope (6GHz, 20Gsps)
 - o Period jitter, waveform, rise/fall time, duty cycle, amplitude
- Agilent E5052B Signal Source Analyzer
 - Phase noise, integrated phase jitter
- Power supply current
 - Agilent 34401A DMM

Data:

- Random Phase jitter, Period Jitter, Duty cycle, Rise/Fall time, Amplitude, Idd
- Output waveforms
- Frequency stability versus temperature

Parameter	Units	Voltage				
	Units	1.8 V	2.5 V	2.8 V	3.0 V	3.3 V
Random Phase jitter (900kHz - 5MHz)	ps, rms	0.51	0.53	0.52	0.52	0.53
Random Phase jitter (12kHz - 5MHz)	ps, rms	1.33	1.31	1.29	1.28	1.28
Random Phase jitter (900kHz – 18.432MHz)*	ps, rms	0.84	0.87	0.85	0.85	0.85
Random Phase jitter (12kHz – 18.432MHz)*	ps, rms	1.49	1.48	1.45	1.44	1.45
Period jitter	ps, rms	2.51	1.89	1.79	1.79	1.73
Period jitter (10,000 cycles)	ps, pk-pk	17.9	13.7	13.5	13.0	12.6
Duty cycle	%	50.0	49.9	50.1	50.2	50.3
Rise time (20% - 80%)	ns	1.23	1.00	0.91	0.98	0.91
Fall time (80% - 20%)	ns	1.26	0.97	0.90	0.97	0.92
Amplitude	V	1.78	2.48	2.77	3.02	3.30
Current consumption (no load, output enabled)	mA	3.56	3.67	3.72	3.75	3.80
Current consumption (no load, output disabled)	mA	3.41	3.49	3.54	3.58	3.66

Table 1. Performance data

*Calculated by extending the noise floor of the phase noise from 5 MHz to 18.432 MHz

The information contained in this document is confidential and proprieta	ry to SiTimo
The information contained in this document is confidential and proprieta	ry to Si fille
Corporation. Unauthorized reproduction or distribution is prohib	ited.

Page 1 of 7

Si Time [®]	Title:	Performance Report SiT2020B, 18.432MHz		
	Туре:	Performance report	Rev:	1.0
	Orig:		Date:	Nov 21, 2014



Figure 1. Duty cycle, Rise/Fall time and Amplitude 1.8V

The information contained in this document is confidential and proprietary to SiTime Corporation. Unauthorized reproduction or distribution is prohibited.

Page 2 of 7

Si Time [®]	Title:	Performance Report SiT2020B, 18.432MHz		
	Туре:	Performance report	Rev:	1.0
	Orig:		Date:	Nov 21, 2014

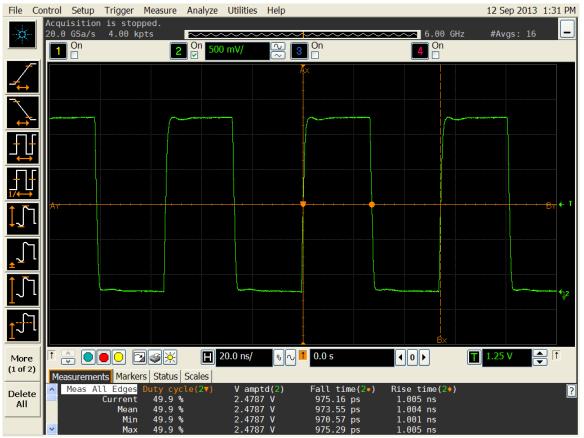


Figure 2. Duty cycle, Rise/Fall time and Amplitude 2.5V

The information contained in this document is confidential and proprietary to SiTime Corporation. Unauthorized reproduction or distribution is prohibited.

Si Time [®]	Title:	Performance Report SiT2020B, 18.432MHz		
	Туре:	Performance report	Rev:	1.0
	Orig:		Date:	Nov 21, 2014

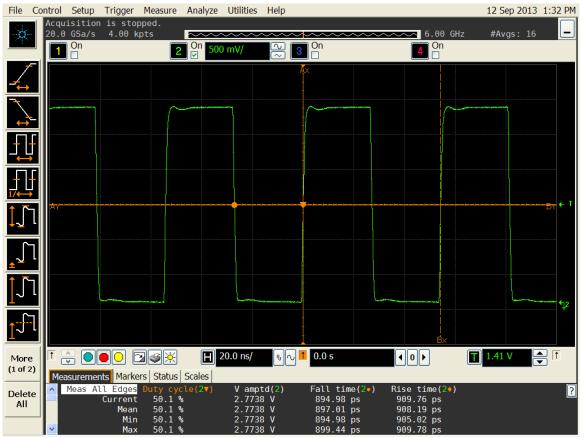


Figure 3. Duty cycle, Rise/Fall time and Amplitude 2.8V

Si Time [®]	Title:	Performance Report SiT2020B, 18.432MHz		
	Туре:	Performance reportRev:1.0		1.0
	Orig:		Date:	Nov 21, 2014



Figure 4. Duty cycle, Rise/Fall time and Amplitude 3.0V

Si Time [®]	Title:	Performance Report SiT2020B, 18.432MHz		
	Туре:	Performance report	Rev:	1.0
	Orig:		Date:	Nov 21, 2014



Figure 5. Duty cycle, Rise/Fall time and Amplitude 3.3V

The information contained in this document is confidential and proprietary to SiTime Corporation. Unauthorized reproduction or distribution is prohibited.

Page 6 of 7

Si Time ^{**}	Title:	Performance Report SiT2020B, 18.432MHz			
	Type:	Performance reportRev:1.0		1.0	
	Orig:		Date:	Nov 21, 2014	

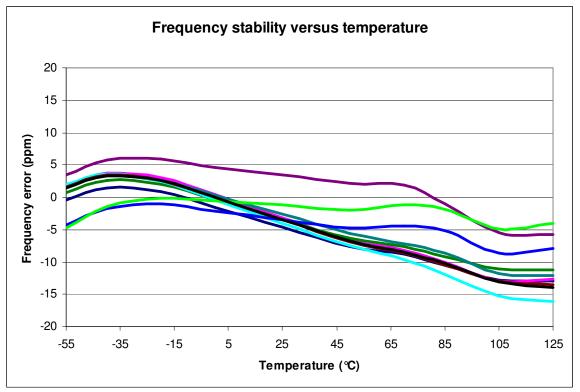


Figure 6. Frequency stability* versus temperature

*Please note that frequency stability in SiTime devices is not depended on output frequency.