

# MEMS OSZILLATOREN UND TAKTGENERATOREN – PRODUKTÜBERSICHT

INSTANT SAMPLES GREEN SOLUTIONS LIFETIME WARRANTY

<b>32 kHz TCXO</b> SiT1552 32.768 kHz 1.5 to 3.63V ±5,10, 20 PPM	<b>µPower XO</b> SiT8021 1-26 MHz 60-280 µA	<b>Ultra-Performance XO</b> SiT8208/9 1-220 MHz	<b>+125°C High Temp XO</b> SiT1618 7.3728-48 MHz -40 to +125°C	<b>AEC-Q100 Automotive Clocks</b> SiT8924 1-110 MHz -40 to +125°C	<b>Clock Generator</b> SiT2001 1-110 MHz	<b>Spread Spectrum XO</b> SiT9001 1-200 MHz	<b>VCXO</b> SiT3807 1.5-45 MHz	<b>(VC) TCXO</b> SiT5000 10-45 MHz ±5 PPM	<b>DCXO</b> SiT3907 1-220 MHz
<b>32 kHz XO and XTAL Replacement</b> SiT1532 32.768 kHz 1508 CSP 1.2 to 3.63V	<b>Low Power XO</b> SiT1602 3.75-77.76 MHz 3.1-4.9 mA	SiT8225 25 MHz 1/10 GbE	SiT8918/9 1-137 MHz -40 to +125°C	SiT8925 115.20-137 MHz -40 to +125°C	SiT2002 115-137 MHz	SiT9003 Low Power 1-110 MHz	SiT3808/9 1-220 MHz	SiT5001/2 1-220 MHz ±5 PPM	SiT3921/2 1-625 MHz
SiT1533 32.768 kHz 2012 SMD 1.2 to 3.63V	SiT8008/9 1-137 MHz 3.1-5.9 mA	SiT8256 156.25 MHz 1/10 GbE	SiT8920/1 1-137 MHz -55 to +125°C	SiT2024 1-110 MHz -40 to +125°C SOT23-5	<b>High Temp Clock Generator</b>	SiT9002 1-220 MHz	SiT3821/2 1-625 MHz	SiT5021/2 1-625 MHz ±2.5 to 5 PPM	<b>Serially Configured XO</b>
SiT1534 1 Hz-32.768 kHz 1.2 to 3.63V	SiT8003XT 0.25mm thin 1-110 MHz 3.1-6.6 mA	SiT9120 25-212.5 MHz	SiT9121/2 1-625 MHz	SiT2025 115.20-137 MHz -40 to +125°C SOT23-5	SiT2018/9 1-137 MHz -40 to +125°C				<b>Serially Configured DCXO</b>
SiT1630 32.768 kHz Oscillator		SiT9156 156.25 MHz 10/40 GbE			SiT2020/1 1-137 MHz -55 to +125°C				SiT3509 1-220 MHz 9 selectable frequencies
									SiT3519 1-220 MHz 9 selectable frequencies

■ NanoDrive™ output for lowest power  
■ LVC MOS output  
■ LVDS/LVPECL output  
● Pin-to-pin compatible with quartz devices  
▽ Available as field programmable for use with Time Machine II Programmer

TYPE	AUSGANGSFREQUENZ	FREQUENZSTABILITÄT [ppm]	SPANNUNG [V]	STROM	BAUFORM [mm]	AUSGANGSLOGIK/ TM II SUPPORT	Logik	Support
<b>Ultra-Small 32 kHz Solutions   XTAL Replacements</b>								
SiT1532, SiT1533	32.768 kHz	10, 20 room; 75, 100 over temp.	1.2 to 3.63	0.90 µA	1.5x0.8x0.55H (CSP), 2.0x1.2x0.6H (QFN)	NanoDrive™, LVC MOS		
SiT1534	1 Hz to 32.768 kHz	10, 20 room; 75, 100 over temp.	1.2 to 3.63	0.90 µA	1.5x0.8x0.55H (CSP), 2.0x1.2x0.6H (QFN)	NanoDrive™, LVC MOS		
SiT1552 TCXO	32.768 kHz	±5, ±10, ±20 over temp.	1.5 to 3.63	0.99 µA	1.5x0.8x0.55H (CSP)	NanoDrive™, LVC MOS		
<b>µPower Oscillators (LVC MOS)   1 to 280 µA power consumption, ultra small size</b>								
SiT1630	32.768 kHz	20 room; 75,100,150 over temp	1.5 to 3.63	1.00 µA	2.0x1.2x0.6H (DFN)	LVC MOS		
SiT8021	1 to 26 MHz	±100	1.8	60 to 280 µA (0.9 µA stby)	1.5x0.8x0.55H (CSP)	LVC MOS		

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	TYPE	AUSGANGSFREQUENZ	FREQUENZSTABILITÄT [ppm]	SPANNUNG [V]	STROM	BAUFORM [mm]	AUSGANGSLOGIK/ TM II SUPPORT	
							Logik	Support
<b>Low-Power Oscillators (LVCMOS)   3.1 to 5.5 mA power consumption</b>								
<b>SiT1602, SiT8008/9</b>	1 to 137 MHz	±20, ±25, ±50	1.8, 2.5 to 3.3	3.1 to 5.5 mA (0.6 - 1.0 µA stby)	2.0x1.6, 2.5x2.0, 3.2x2.5, 5.0x3.2, 7.0x5.0 (DFN)	LVCMOS		✓
<b>Ultra-Performance Oscillators   0.3 to 0.6 ps RMS integrated phase jitter</b>								
<b>SiT8208/9, SiT8225/56</b>	1 to 220 MHz	±10, ±20, ±25, ±50	1.8, 2.5 to 3.3	29 to 36 mA (10 µA stby)	2.5x2.0, 3.2x2.5, 5.0x3.2, 7.0x5.0 (DFN)	LVCMOS		✓
<b>SiT9120/21/22 SiT9156</b>	1 to 625 MHz	±10, ±20, ±25, ±50	2.5 to 3.3	54 to 69 mA	3.2x2.5, 5.0x3.2, 7.0x5.0 (DFN)	LVPECL, LVDS		✓
<b>High-Temperature and Automotive Oscillators   +125°C operating temperature, 0.1 ppb/g (G-sensitivity)</b>								
<b>SiT1618, SiT8918/19 -40 to +125°C</b>	1 to 137 MHz	±20, ±25, ±30, ±50	1.8, 2.5 to 3.3	3.6 to 5.4 mA (1.0 µA stby)	2.0x1.6, 2.5x2.0, 3.2x2.5, 5.0x3.2, 7.0x5.0 (DFN)	LVCMOS		✓
<b>SiT8920/21 SiT8924/25 -55 to +125°C</b>	1 to 137 MHz	±20, ±25, ±30, ±50	1.8, 2.5 to 3.3	3.6 to 5.4 mA (1.0 µA stby)	2.0x1.6, 2.5x2.0, 3.2x2.5, 5.0x3.2, 7.0x5.0 (DFN)	LVCMOS		✓
<b>VCMXO   ±25 to ±1600 ppm pull range, &lt;1% linearity, 0.6 ps RMS integrated phase jitter</b>								
<b>SiT3807/8/9</b>	1 to 220 MHz	±10, ±25, ±50	1.8, 2.5 to 3.3	29 to 34 mA (10 to 70 µA stby)	2.5x2.0, 3.2x2.5, 5.0x3.2, 7.0x5.0 (DFN)	LVCMOS		✓
<b>SiT3821/22</b>	1 to 625 MHz	±10, ±25, ±50	2.5 to 3.3	55 to 69 mA	3.2x2.5, 5.0x3.2, 7.0x5.0 (DFN)	LVPECL, LVDS		✓
<b>DCXO (Digitally-Controlled Oscillators)   ±25 to ±1600 ppm pull range, &lt;1% linearity, 0.5 ps RMS integrated phase jitter</b>								
<b>SiT3907</b>	1 to 220 MHz	±10, ±25, ±50	1.8, 2.5 to 3.3	32 mA	3.2x2.5, 5.0x3.2, 7.0x5.0 (DFN)	LVCMOS		✓
<b>SiT3921/22</b>	1 to 625 MHz	±10, ±25, ±50	2.5 to 3.3	55 to 69 mA	3.2x2.5, 5.0x3.2, 7.0x5.0 (DFN)	LVPECL, LVDS		✓
<b>SCXO (Serially-Configured Oscillators)   9 user selectable output frequencies, single-pin programmability</b>								
<b>SiT3509</b>	1 to 220 MHz	±25, ±50	1.8, 2.5, 2.8, 3.3	29 to 31 mA	2.5x2.0, 3.2x2.5, 5.0x3.2, 7.0x5.0 (DFN)	LVCMOS		
<b>SiT3519 Digital Control</b>	1 to 220 MHz	±25, ±50	1.8, 2.5, 2.8, 3.3	29 to 31 mA	2.5x2.0, 3.2x2.5, 5.0x3.2, 7.0x5.0 (DFN)	LVCMOS		
<b>TCXO/VCTCXO   ±12.5 to ±50 ppm pull range, 0.6 ps RMS integrated phase jitter</b>								
<b>SiT5000/1/2</b>	1 to 220 MHz	±2.5, ±5	1.8, 2.5, 2.8, 3.0, 3.3	29 to 34 mA (10 to 70 µA stby)	2.5x2.0, 3.2x2.5, 5.0x3.2, 7.0x5.0 (DFN)	LVCMOS		
<b>SiT5021/22</b>	1 to 625 MHz	±2.5, ±5	2.5, 3.3, 2.25 to 3.63	55 to 69 mA	3.2x2.5, 5.0x3.2, 7.0x5.0 (DFN)	LVPECL, LVDS		
<b>SSXO (Spread Spectrum Oscillators)   ±0.25 to ±2% center spread, -0.5% to 4.0% down spread</b>								
<b>SiT9001/3</b>	1 to 200 MHz	±25, ±50, ±100	1.8, 2.5, 3.3	3.7 to 20 mA (0.4 to 30 µA stby)	2.5x2.0, 3.2x2.5, 5.0x3.2, 7.0x5.0 (DFN)	LVCMOS		✓
<b>SiT9002</b>	1 to 220 MHz	±25, ±50	1.8, 2.5, 3.3	48 to 75 mA	5.0x3.2, 7.0x5.0 (DFN)	LVPECL, CML LVDS, HCSL		✓
<b>Clock Generators with Integrated Resonator   Single output, low power</b>								
<b>SiT2001, SiT2002</b>	1 to 137 MHz	±20, ±25, ±50	1.8, 2.5 to 3.3	3.6 to 5.4 mA (1.0 µA stby)	2.9 x 2.8 (SOT23-5)	1 x LVCMOS		✓
<b>High-Temp and Automotive Clock Generators   +125°C, integrated resonator, single output, low power, 0.1 ppb/g</b>								
<b>SiT2018/19 -40 to +125°C</b>	1 to 137 MHz	±20, ±25, ±30, ±50	1.8, 2.5 to 3.3	3.6 to 5.4 mA (1.0 µA stby)	2.9 x 2.8 (SOT23-5)	1 x LVCMOS		✓
<b>SiT2020/21, SiT2024/25 -55 to +125°C</b>	1 to 137 MHz	±20, ±25, ±30, ±50	1.8, 2.5 to 3.3	3.6 to 5.4 mA (1.0 µA stby)	2.9 x 2.8 (SOT23-5)	1 x LVCMOS		✓

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