

MEMS OSCILLATORS AND CLOCK GENERATORS – PRODUCT PORTFOLIO

INSTANT SAMPLES
 GREEN SOLUTIONS
 LIFETIME WARRANTY

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

■ NanoDrive™ output for lowest power
 ■ LVDS/LVPECL output
 ■ Available as field programmable for use with Time Machine II Programmer

■ LVCMOS output
 Pin-to-pin compatible with quartz devices

TYPE	OUTPUT FREQUENCY	FREQUENCY STABILITY [ppm]	SUPPLY VOLTAGE [V]	SUPPLY CURRENT	PACKAGE [mm]	OUTPUT LOGIC/ TM II SUPPORT	
						Logic	Support
Ultra-Small 32 kHz Solutions XTAL Replacements							
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™. LVCMOS	
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™. LVCMOS	
SiT1552 TCXO	32.768 kHz	±5, ±10, ±20 over temp.	1.5 to 3.63	0.99 µA	1.5x0.8x0.55H (CSP)	NanoDrive™. LVCMOS	
µPower Oscillators (LVCMOS) 1 to 280 µA power consumption, ultra small size							
SiT1630	32.768 kHz	20 room; 75,100,150 over temp	1.5 to 3.63	1.00 µA	2.0x1.2x0.6H (DFN)	LVCMOS	
SiT8021	1 to 26 MHz	±100	1.8	60 to 280 µA (0.9 µA stby)	1.5x0.8x0.55H (CSP)	LVCMOS	

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						Logic	Support
Low-Power Oscillators (LVCMOS) 3.1 to 5.5 mA power consumption							
SIT1602, SIT8008/9	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	✓
Ultra-Performance Oscillators 0.3 to 0.6 ps RMS integrated phase jitter							
SIT8208/9, SIT8225/56	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	✓
SIT9120/21/22 SIT9156	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	✓
High-Temperature and Automotive Oscillators +125°C operating temperature, 0.1 ppb/g (G-sensitivity)							
SIT1618, SIT8918/19 -40 to +125°C	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	✓
SIT8920/21 SIT8924/25 -55 to +125°C	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	✓
VCXO ±25 to ±1600 ppm pull range, <1% linearity, 0.6 ps RMS integrated phase jitter							
SIT3807/8/9	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	✓
SIT3821/22	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	✓
DCXO (Digitally-Controlled Oscillators) ±25 to ±1600 ppm pull range, <1% linearity, 0.5 ps RMS integrated phase jitter							
SIT3907	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	✓
SIT3921/22	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	✓
SCXO (Serially-Configured Oscillators) 9 user selectable output frequencies, single-pin programmability							
SIT3509	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	
SIT3519 Digital Control	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	
TCXO/VCTCXO ±12.5 to ±50 ppm pull range, 0.6 ps RMS integrated phase jitter							
SIT5000/1/2	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	
SIT5021/22	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	
SSXO (Spread Spectrum Oscillators) ±0.25 to ±2% center spread, -0.5% to 4.0% down spread							
SIT9001/3	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	✓
SIT9002	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	✓
Clock Generators with Integrated Resonator Single output, low power							
SIT2001, SIT2002	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	✓
High-Temp and Automotive Clock Generators +125°C, integrated resonator, single output, low power, 0.1 ppb/g							
SIT2018/19 -40 to +125°C	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	✓
SIT2020/21, SIT2024/25 -55 to +125°C	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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