



LEAD TIME

SiTime 3 WEEKS

CRYSTAL OSCILLATORS 12 WEEKS

CRYSTAL OSCILLATORS 16 WEEKS



Product Selector Guide



MICROCOMPUTERS • SYSTEMS • COMPONENTS • VERTRIEBS GMBH

DISTRIBUTOR OF **SiTime**™

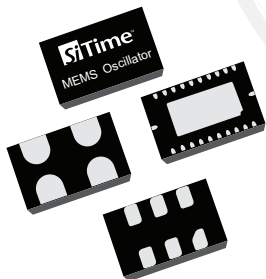
Silicon Timing Solutions



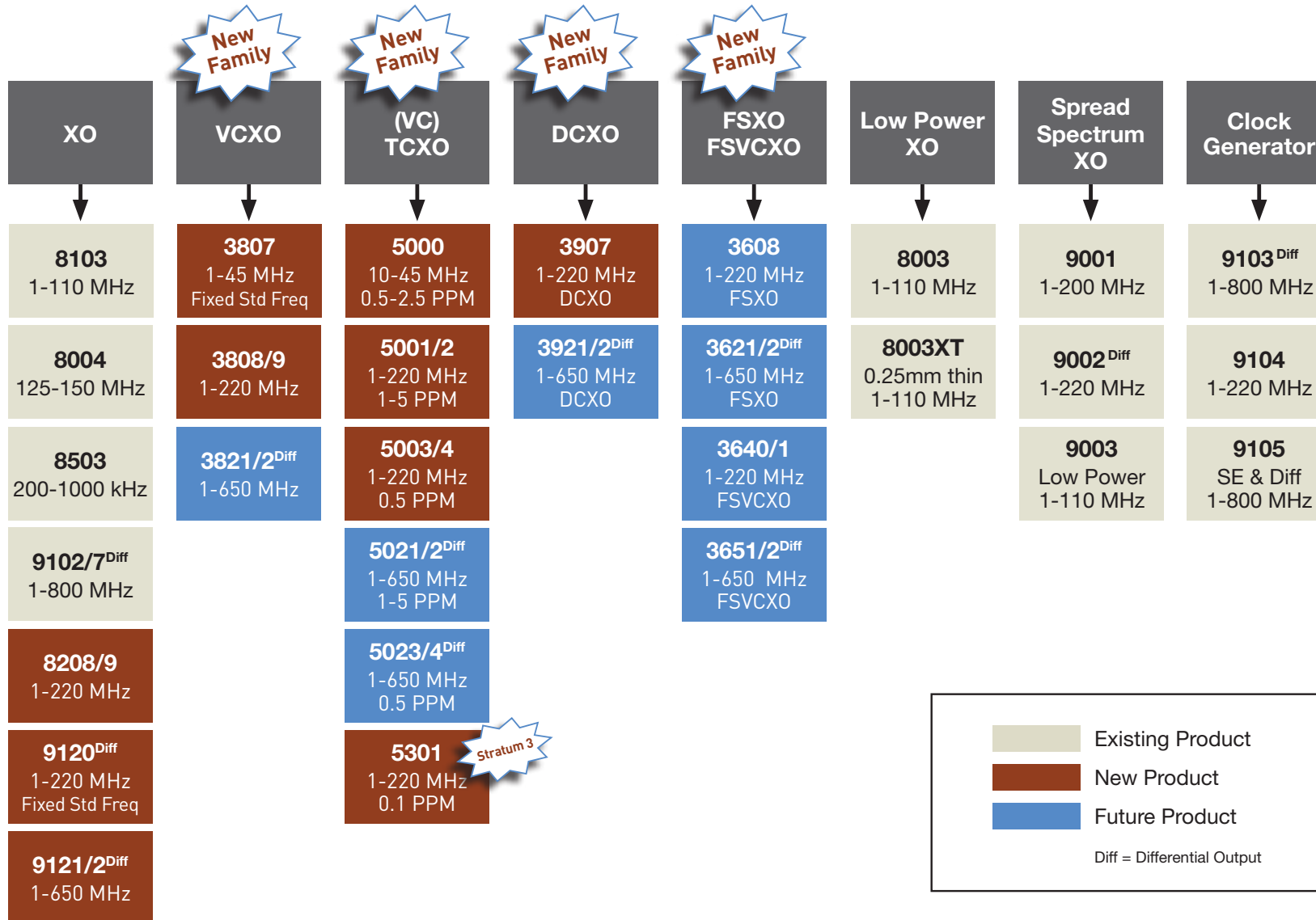
MEMS Oscillators and Clock Generators



- 100% Drop-in Replacement to XO, VCXO, TCXO
- Ultra-Stable: As low as 0.1 PPM
- TCXO with Stratum 3 Performance
- Ultra-Low Jitter: $0.5\text{ps}_{\text{rms}}$ (12kHz-20MHz)
- Widest Frequency Range: 200 kHz to 800 MHz
- Wide Operating Temp Range: Up to -40°C to $+105^{\circ}\text{C}$
- New Specialty Products: Digitally Controlled XO
- Shortest Lead Times, Any Frequency!
- Samples Shipped Within 48 Hours



Timing Solutions






Single-Ended Oscillators - XO, VCXO, (VC)TCXO



Target Markets	Devices	Function	Key Features	Output Frequency (MHz)	Frequency Stability (PPM)	Pull Range (PPM)	Logic	Supply Current (mA Typ)	Temp Range*	Packages	Additional Features and Options ¹				
XO											Oscillators				
New! Networking, Telecom, Server and Storage	SIT8208	XO	<ul style="list-style-type: none"> Best Stability Lowest Phase Jitter: 0.5ps_{rms} 	1-80	10, 20, 25, 50	-	CMOS LVTTTL	32 80µA (Stby)	C, I, E	2.5x2.0mm 3.2x2.5mm 5.0x3.2mm 7.0x5.0mm	✓	✓	-	-	
	SIT8209			80-220		-					✓	✓	-	-	
Computing, Consumer, Industrial	SIT8103	XO	<ul style="list-style-type: none"> General Purpose Cost Effective High Frequency Low-Power 	1-110	20, 25, 30, 50	-	CMOS LVTTTL	6.7 1.2µA (Stby) 6.2 1.2µA (Stby)	C, I	2.5x2.0mm 3.2x2.5mm 5.0x3.2mm 7.0x5.0mm	✓	✓	-	-	
	SIT8004			125-150		-					✓	✓	-	-	
Portable, Handheld Consumer and Computing	SIT8003 ²	XO	<ul style="list-style-type: none"> Low-Power 	1-110	20, 25, 30, 50	-	CMOS LVTTTL	3.7 1.2µA (Stby)	C, I	2.5x2.0mm 3.2x2.5mm 5.0x3.2mm 7.0x5.0mm	✓	✓	-	-	
Low Frequency Computing, Consumer	SIT8503	XO	<ul style="list-style-type: none"> High Performance kHz Oscillator 	0.20-1	20, 25, 30, 50	-	CMOS LVTTTL	5.9 2.4µA (Stby)	C, I	2.5x2.0mm 3.2x2.5mm 5.0x3.2mm 7.0x5.0mm	✓	✓	-	-	
SSXO											Spread-Spectrum Control Oscillators				
Spread Spectrum for General Computing, Memory, µC, Portable and Handheld	SIT9001	SSXO	<ul style="list-style-type: none"> Spread-Spectrum: Center-Spread and Down Spread Options 	1-200	50, 100	-	CMOS LVTTTL	20 30µA (Stby) 3.7 1.2µA (Stby)	C, I	2.5x2.0mm 3.2x2.5mm 5.0x3.2mm 7.0x5.0mm	✓	✓	-	✓	
	SIT9003			1-110		-					✓	✓	-	✓	
VCXO											Voltage-Controlled Oscillators				
New Family! Networking, Telecom, Medical, ATE, Video, xDSL, and Embedded Systems	SIT3807	VCXO	<ul style="list-style-type: none"> Fixed Frequency Options for Lowest Cost Lowest Phase Jitter: 0.5ps_{rms} Widest Pull-Range 1% Pull-Range Linearity Lowest Phase Jitter: 0.5ps_{rms} 	1.5-45 (Fixed Options)	25, 50	25-200 (1% Linearity)	CMOS LVTTTL	32 80µA (Stby)	C, I, E	2.5x2.0mm 3.2x2.5mm 5.0x3.2mm 7.0x5.0mm	✓	✓	✓	-	
	SIT3808	VCXO		1-80		10, 25, 50					25-1600 (1% Linearity)	✓	✓	✓	-
	SIT3809			80-220								✓	✓	✓	-
(VC)TCXO											Temperature-Compensated Oscillators				
New Families! Networking, Telecom, Server and Storage, Wireless, GPS, Satellite, ATE, Broadcast Video, Basestations, Media Gateways, 3G/4G USB Cards	SIT5301/2	(VC) TCXO	<ul style="list-style-type: none"> <0.37ppm 24-Hr Holdover <4.6ppm 20-Year Total Stability Fixed Frequency for Lowest Cost (SIT5000) Widest Pull-Range Lowest Phase Jitter: 0.5ps_{rms} Best Stability Widest Pull-Range Lowest Phase Jitter: 0.5ps_{rms} 	1-60, 60-220	0.1	12.5	CMOS LVTTTL	32 80µA (Stby)	C, I	2.5x2.0mm 3.2x2.5mm 5.0x3.2mm 7.0x5.0mm	-	-	✓	-	
	SIT5000	(VC) TCXO		10-40 (Fixed Options)		0.5, 1.0, 1.5, 2.5					12.5	✓	✓	✓	-
	SIT5001			1-80		1.0, 1.5, 2.5, 5					12.5-50	✓	✓	✓	-
	SIT5002			80-220								✓	✓	✓	-
	SIT5003	(VC) TCXO		1-80		0.5					12.5-50	✓	✓	✓	-
SIT5004	80-220		✓	✓	✓		-								

Differential Oscillators - XO, VCXO, (VC)TCXO



Target Markets	Devices	Function	Key Features	Output Frequency (MHz)	Frequency Stability (PPM)	Pull Range (PPM)	Logic	Supply Current (mA Typ)	Temp Range*	Packages	Additional Features and Options ¹			
XO											Oscillators			
 Networking, Telecom, Server and Storage	SIT9120	XO	<ul style="list-style-type: none"> Fixed Frequency Options for Lowest Cost (SIT9120) Best Stability Lowest Phase Jitter: 0.5ps_{rms} 	1-220 (Fixed Options)	25, 50	-	LVPECL LVDS	42-55 100µA (Stby)	C, I	5.0x3.2mm 7.0x5.0mm	✓	✓	-	-
	SIT9121			1-220	10, 20, 25, 50						✓	✓	-	-
	SIT9122			220-650	✓						✓	-	-	
Networking, Storage, 10G, Fibre Channel, GigE	SIT9102	XO	<ul style="list-style-type: none"> General Purpose Differential XO High-Frequency to 800MHz (SIT9107) 	1-220	10, 15, 20, 25, 50	-	LVPECL LVDS HCSL CML	48-75	N, C, I	5.0x3.2mm 7.0x5.0mm	✓	✓	-	-
	SIT9107			220-650	✓	✓					-	-		
SSXO											Spread-Spectrum Control Oscillators			
Computing, Servers with Low EMI Requirements	SIT9002	SSXO	<ul style="list-style-type: none"> Spread-Spectrum: Center-Spread and Down Spread Options 	1-220	25, 50	-	LVPECL LVDS HCSL CML	48-75	C, I	5.0x3.2mm 7.0x5.0mm	✓	✓	-	✓
VCXO											Voltage-Controlled Oscillators			
 Networking, Telecom, Medical, ATE, Video, xDSL, Embedded Systems	SIT3821	VCXO	<ul style="list-style-type: none"> Best Stability 1% Pull-Range Linearity Lowest Phase Jitter: 0.5ps_{rms} 	1-220	10, 25, 50	25-1600 (1% Linearity)	LVPECL LVDS	43-56 100µA (Stby)	C, I	5.0x3.2mm 7.0x5.0mm	✓	✓	✓	-
	SIT3822			220-650							✓	✓	✓	-
(VC)TCXO											Temperature-Compensated Oscillators			
 Networking, Telecom, Server and Storage, Wireless, GPS, Satellite, ATE, Broadcast Video, Basestations, Media Gateways, 3G/4G USB Cards	SIT5021	(VC) TCXO	<ul style="list-style-type: none"> Widest Pull-Range Lowest Phase Jitter: 0.5ps_{rms} 	1-220	1-5	12.5-50	LVPECL LVDS	43-56 100µA (Stby)	C, I	5.0x3.2mm 7.0x5.0mm	✓	✓	✓	-
	SIT5022			220-650							✓	✓	✓	-
	SIT5023	(VC) TCXO	<ul style="list-style-type: none"> Best Stability Widest Pull-Range Lowest Phase Jitter: 0.5ps_{rms} 	1-220	0.5	12.5-50	LVPECL LVDS	43-56 100µA (Stby)	C, I	5.0x3.2mm 7.0x5.0mm	✓	✓	✓	-
	SIT5024			220-650							✓	✓	✓	-

* Temperature Range Options: N: 0°C to 70°C C: -20°C to 70°C I: -40°C to 85°C Note 1: All Products Have SoftEdge™ Drive Strength Option

Special Function - FSX0, DCX0, and FSVCX0



Target Markets	Devices	Function	Key Features	Output Frequency (MHz)	Frequency Stability (PPM)	Pull Range (PPM)	Output Logic	Number of Selectable Frequencies	Supply Current (mA Typ)	Temp Range*	Packages	Additional Features and Options ¹			
FSX0												Pin-Selectable Frequency Oscillators			
All Networking, Telecom and Storage	SiT3608	FSX0	<ul style="list-style-type: none"> Pin-Selectable Frequency Control Lowest Phase Jitter: 0.5ps_{rms} 	1-220	10-50	-	CMOS LVTTTL	9	32 80µA (Stby)	C, I	5.0x3.2mm 7.0x5.0mm	✓	✓	-	-
	SiT3621			LVPECL LVDS			3	43-56 100µA (Stby)	✓			✓	-	-	
	SiT3622			LVPECL LVDS			3	43-56 100µA (Stby)	✓			✓	-	-	
DCX0												Digitally-Controlled Oscillators			
All Networking, Telecom and Storage	SiT3907	DCX0	<ul style="list-style-type: none"> Single-Pin, Serial Programmable 0.01% Pull-Range Linearity Lowest Phase Jitter: 0.5ps_{rms} 	1-220	10-50	25-1600	CMOS LVTTTL	Any Frequency	32 80µA (Stby)	C, I	3.2x2.5mm 5.0x3.2mm 7.0x5.0mm	✓	-	-	✓
	SiT3921 [†]			LVPECL LVDS			3		43-56 100µA (Stby)			✓	-	-	✓
	SiT3922 [†]			LVPECL LVDS			3		43-56 100µA (Stby)			✓	-	-	✓
FSVCX0												Pin-Selectable Frequency + VCXO			
Networking, Telecom and Storage, Broadband Access, µP, DSP, FPGA	SiT3640	FSVCX0	<ul style="list-style-type: none"> Pin-Selectable Frequency Control Widest Voltage-Control Pull-Range Lowest Phase Jitter: 0.5ps_{rms} 	1-220	10-50	25-1600	CMOS LVTTTL	3	32 80µA (Stby)	C, I	5.0x3.2mm 7.0x5.0mm	✓	-	✓	-
	SiT3641			9				✓				-	✓	-	
	SiT3651			LVPECL LVDS			3	43-56 100µA (Stby)	✓			-	✓	-	
	SiT3652						✓	-	✓			-			

Clock Generators



Target Markets	Devices	Function	Key Features	Output Frequency (MHz)	Frequency Stability (PPM)	Output Logic	Number of PLLs	Number of Output Channels	Supply Current (mA Typ)	Temp Range*	Packages	Additional Features and Options ¹			
												OE	Standby	V-Control	SSC
Networking, Storage, Computing, Servers	SiT9103	Clock Gen	• 3 PLL, 3 Output Programmable Clock Generator	1-800	25-50	LVPECL LVDS HCSL CML	3	3 Differential	40-70 per Channel	C, I	7.0x5.0mm 20-pin	✓	✓	-	✓
	SiT9104		• 3 PLL, 3 Output Programmable Clock Generator	1-220		CMOS LVTTTL		6 Single Ended	<26 per Channel 30µA (Stby)		7.0x5.0mm 22-pin	✓	✓	-	✓
	SiT9105		• Clock Generator with SE and Differential Outputs	1-220 (SE) 1-220 (Diff)		CMOS LVTTTL LVPECL LVDS HCSL CML		2 Single Ended 1 Differential	31mA per SE Channel, 65mA Diff		7.0x5.0mm 22-pin	✓	✓	-	✓

* Temperature Range Options: C: -20°C to 70°C I: -40°C to 85°C † Samples Available Q2 2012 Note 1: All Products Have SoftEdge™ Drive Strength Option

**Sample Any Frequency, Voltage or Package
Shipped Within 48 Hours**



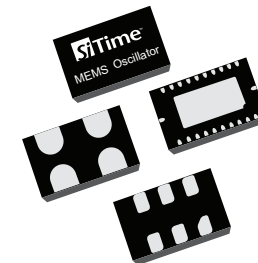
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