Time Machine II - MEMS Oscillator Programmer	
Part number	SiT6100DK
Key Features	- Easily configure blank parts to your exact specification, get instant samples - Includes any necessary hardwares
Customizable Frequency	LVPECL/LVDS: 1 to 625 MHz LVCMOS: 1 to 220 MHz
Temperature range	-20 to +70 °C, -40 to +85 °C, -40 to +105 °C, -40 to +125 °C, -55 to +125 °C
Frequency Stability	±20 to ±50 ppm
Package options	QFN: 2016, 2520, 3225, 5032, 7050 SOT23-5

Notes:

1. SiT6100DK inludes programmer, socket boards for different packages, USB Cable and Tweezers

2. Details, please refer http://www.sitime.com/support/time-machine-oscillator-programmer#magictabs_KM148_2

Lowest Price Oscillator						
Product	Part number	Package	Frequency (MHz)	Frequency stability (ppm)	Temperature	Key Values
SiT1711B	N/A	SOT23-5	12, 24, 25, 26, 27, 33.3333, 48, 50, 54, 66.66667	±50	-20 to +70 °C	Lowest price

Notes:

1. Price applicable for ±50 ppm

2. The SiT1711B is available in one of above frequencies

3. Wide, continuous voltage range - 2.5 to 3.3V

Features & benefits of all SiTime devices

a. 3 year warranty

b. Best reliability - over 1 billion hours MTBF

c. Best quality - less than 2 DPPM

d. MEMS technology offers best shock and vibration immunity

e. RoHS and REACH compliant, lead-free, Halogen-free and Antimony-free

f. Available in 1KU and 3KU reels only for best cost

g. SiTime's devices are marked with lot code information only. There is no logo or frequency marking on the device.

kHz MEMS Oscillators						
Product	Part number	Package	Frequency	Frequency stability (ppm)	Temperature	Key Values
SiT1532AI - 32 kHz XO	SiT1532AI-J4-DCC-32.768	CSP 1508	32.768 kHz	10 (Room Temp) 75 (-10 to +70 °C) 100 (-40 to +85 °C)	-40 to +85 °C	80% smaller than quartz 2012 package Drives 2 or more loads - reduce components and cost Most robust - shock, vibration, cold-temp startup
SiT1630AI - 32 kHz XO	SiT1630AI-H4-DCC-32.768	QFN 2012	32.768 kHz	10 (Room Temp) 75 (-10 to +70 °C) 100 (-40 to +85 °C)	-40 to +85 °C	70% smaller than quartz 2012 package Drives 2 or more loads - reduce components and cost Most robust - shock, vibration, cold-temp startup
SiT1552AI - 32 kHz TCXO	SiT1552AI-JE-DCC-32.768	CSP 1508	32.768 kHz	±5 (Room Temp) ±5 (-40 to +85 °C)	-40 to +85 °C	Most Accurate 85% Smaller Lowest Power - ideal for Wearable, IoT

b. Best reliability - over 1 billion hours MTBF

1. SiT6100DK inludes programmer, socket boards for different packages, USB Cable and Tweezers

d. MEMS technology offers best shock and vibration immunity

e. RoHS and REACH compliant, lead-free, Halogen-free and Antimony-free

f. Available in 1KU and 3KU reels only for best cost

g. SiTime's devices are marked with lot code information only. There is no logo or frequency marking on the device.

Low Power MHz MEMS Oscillators						
Product	Part number	Package	Frequency	Frequency stability (ppm)	Temperature	Key Values
SOT23-5 package						
SiT2001B	SiT2001BI-S1[2,3]	SOT23-5	1 to 110 MHz	±20	-40 to +85 °C	Any frequency with best stability, ±20 ppm Low price Best manufacturability - Leaded package enables solder joint inspection, rework
SiT2002B	SiT2002BI-S1[2,3]	SOT23-5	115 to 137 MHz	±20	-40 to +85 °C	High frequency with best stability, ±20 ppm Low price Best manufacturability - Leaded package enables solder joint inspection, rework
QFN packages						
SiT8008B	SiT8008BI-81[2,3]	7050	1 to 110 MHz	±20	-40 to +85 °C	Any frequency, shortest lead time Low price Small 2.0 x 1.6 mm package available
	SiT8008BI-31[2,3]	5032				
	SiT8008BI-71[2,3]	2016				
	SiT8008BI-21[2,3]	3225				
	SiT8008BI-11[2,3]	2520				
SiT8009B	SiT8009BI-81[2,3]	7050	115 to 137 MHz	±20	-40 to +85 °C	High frequency, shortest lead time Lowest power Best stability, ±20 ppm
	SiT8009BI-31[2,3]	5032				
	SiT8009BI-71[2,3]	2016				
	SiT8009BI-21[2,3]	3225				
	SiT8009BI-11[2,3]	2520				

Notes:

1. SiT2001B/SiT2002B/SiT8008B/SiT8009B support any stability from ±20 ppm to ±50 ppm over both -20°C to +70°C and -40°C to +85°C

2. Parts can be ordered as programmed or unprogrammed. For part numbering, please refer the following.

Programmed parts: Determine the part number using the part number generator

Unprogrammed parts: Determine the part number with the table 1 plus the table 4 or the table 6 in the Unprogrammed part datasheet (Datasheet is attached in the end of this pricebook).

3. Unprogrammed (blank) devices can be programmed using SiTime's Time Machine II programmer (for samples and small volume orders)

Features & benefits of all SiTime devices

a. 3 year warranty

b. Best reliability - over 1 billion hours MTBF

c. Best quality - less than 2 DPPM

d. MEMS technology offers best shock and vibration immunity

e. RoHS and REACH compliant, lead-free, Halogen-free and Antimony-free

f. Available in 1KU and 3KU reels only for best cost

g. SiTime's devices are marked with lot code information only. There is no logo or frequency marking on the device.

Ultra-Performance MHz MEMS Oscillators						
Product	Part number	Package	Frequency	Frequency stability (ppm)	Temperature	Key Values
SiT8208	SiT8208AI-81[2,3]	7050	1 to 80 MHz	±20	-40 to +85 °C	Excellent jitter for networking Best stability: ±20 ppm Any frequency, shortest lead times
	SiT8208AI-31[2,3]	5032				
	SiT8208AI-21[2,3]	3225				
	SiT8208AI-G1[2,3]	2520				
SiT8209	SiT8209AI-81[2,3]	7050	80 to 220 MHz	±20	-40 to +85 °C	Excellent jitter for networking Best stability: ±20 ppm Any frequency, shortest lead times
	SiT8209AI-31[2,3]	5032				
	SiT8209AI-21[2,3]	3225				
	SiT8209AI-G1[2,3]	2520				

Notes:

1. SiT8208/SiT8209 support any stability from ±20 ppm to ±50 ppm over both -20°C to +70°C and -40°C to +85°C

2. Parts can be ordered as programmed or unprogrammed. For part numbering, please refer the following.

Programmed parts: Determine the part number using the part number generator

Unprogrammed parts: Determine the part number with the table 1 and the table 5 in the Unprogrammed part datasheet (Datasheet is attached in the end of this pricebook).

3. Unprogrammed (blank) devices can be programmed using SiTime's Time Machine II programmer (for samples and small volume orders)

Features & benefits of all SiTime devices

a. 3 year warranty

b. Best reliability - over 1 billion hours MTBF

c. Best quality - less than 2 DPPM

d. MEMS technology offers best shock and vibration immunity

e. RoHS and REACH compliant, lead-free, Halogen-free and Antimony-free

f. Available in 1KU and 3KU reels only for best cost

g. SiTime's devices are marked with lot code information only. There is no logo or frequency marking on the device.

Differential (LVPECL/LVDS) MHz MEMS Oscillators							
Product	Part number	Package	Output Type	Frequency	Frequency stability (ppm)	Temperature	Key Values
SiT9120	SiT9120AI-1D1[2,3]	7050	LVPECL	25, 50, 74.175824, 74.25, 75, 98.304, 100, 106.25, 125, 133, 133.3, 148.351648, 148.5, 150, 155.52, 156.25, 161.1328, 166, 166.6, 200, 212.5 MHz	±20	-40 to +85 °C	Shortest lead time Best stability: ±20ppm Small 3.2x2.5 mm package
	SiT9120AI-2D1[2,3]		LVDS				
	SiT9120AI-1C1[2,3]	5032	LVPECL				
	SiT9120AI-2C1[2,3]		LVDS				
	SiT9120AI-1B1[2,3]	3225	LVPECL				
	SiT9120AI-2B1[2,3]		LVDS				
SiT9121	SiT9121AI-1D1[2,3]	7050	LVPECL	1 to 220 MHz	±20	-40 to +85 °C	Wide, programmable frequency range Shortest lead time Best stability: ±20ppm Small 3.2x2.5 mm package
	SiT9121AI-2D1[2,3]		LVDS				
	SiT9121AI-1C1[2,3]	5032	LVPECL				
	SiT9121AI-2C1[2,3]		LVDS				
	SiT9121AI-1B1[2,3]	3225	LVPECL				
	SiT9121AI-2B1[2,3]		LVDS				
SiT9122	SiT9122AI-1D1[2,3]	7050	LVPECL	220 to 625 MHz	±20	-40 to +85 °C	Wide, programmable frequency range Shortest lead time Best stability: ±20ppm Small 3.2x2.5 mm package
	SiT9122AI-2D1[2,3]		LVDS				
	SiT9122AI-1C1[2,3]	5032	LVPECL				
	SiT9122AI-2C1[2,3]		LVDS				
	SiT9122AI-1B1[2,3]	3225	LVPECL				
	SiT9122AI-2B1[2,3]		LVDS				

Notes:

1. SiT9120/SiT9121/SiT9122 support any stability from ±20 ppm to ±50 ppm over both -20°C to +70°C and -40°C to +85°C

2. Parts can be ordered as programmed or unprogrammed. For part numbering, please refer the following.

Programmed parts: Determine the part number using the part number generator

Unprogrammed parts: Determine the part number with the table 1 and the table 5 in the Unprogrammed part datasheet (Datasheet is attached in the end of this pricebook).

3. Unprogrammed (blank) devices can be programmed using SiTime's Time Machine II programmer (for samples and small volume orders)

Features & benefits of all SiTime devices

a. 3 year warranty

b. Best reliability - over 1 billion hours MTBF

c. Best quality - less than 2 DPPM

d. MEMS technology offers best shock and vibration immunity

e. RoHS and REACH compliant, lead-free, Halogen-free and Antimony-free

f. Available in 1KU and 3KU reels only for best cost

g. SiTime's devices are marked with lot code information only. There is no logo or frequency marking on the device.

High Temperature MHz MEMS Oscillators						
Product	Part number	Package	Frequency	Frequency stability (ppm)	Temperature	Key Values
SOT23-5 package						
SiT2018B	SiT2018BE-S1[1,2]	SOT23-5	1 to 110 MHz	±20	-40 to +105 °C	Low price Best stability (±20ppm) at high temp Best manufacturability - Leaded package enables solder joint inspection, rework
	SiT2018BA-S1[1,2]				-40 to +125 °C	
	SiT2018BE-S8[1,2]			±30	-40 to +105 °C	Low price Any frequency with shortest lead times Best manufacturability - Leaded package enables solder joint inspection, rework
	SiT2018BA-S8[1,2]				-40 to +125 °C	
SiT2019B	SiT2019BE-S1[1,2]	SOT23-5	115 to 137 MHz	±20	-40 to +105 °C	Low price Best stability (±20ppm) at high temp and high frequency Best manufacturability - Leaded package enables solder joint inspection, rework
	SiT2019BA-S1[1,2]				-40 to +125 °C	
	SiT2019BE-S8[1,2]			±30	-40 to +105 °C	Low price Any frequency with shortest lead times Best manufacturability - Leaded package enables solder joint inspection, rework
	SiT2019BA-S8[1,2]				-40 to +125 °C	
SiT2020B	SIT2020BM-S1[1,2]	SOT23-5	1 to 110 MHz	±20	-55 to +125 °C	Any frequency, shortest lead time Best stability (±20 ppm) over -55°C to +125°C Best manufacturability - Leaded package enables solder joint inspection, rework
	SIT2020BM-S8[1,2]			±30		Any frequency, shortest lead time Best manufacturability - Leaded package enables solder joint inspection, rework -55°C to +125°C temperature range
SiT2021B	SIT2021BM-S1[1,2]	SOT23-5	115 to 137 MHz	±20	-55 to +125 °C	Any high frequency, shortest lead time Best stability (±20 ppm) over -55°C to +125°C at high frequency Best manufacturability - Leaded package enables solder joint inspection, rework
	SIT2021BM-S8[1,2]			±30		Any frequency, shortest lead time Best manufacturability - Leaded package enables solder joint inspection, rework -55°C to +125°C temperature range
QFN packages						
SiT8918B	SiT8918BE-81[1,2]	7050	1 to 110 MHz	±20	-40 to +105 °C	Any frequency, shortest lead time Best stability (±20 ppm) at high temp Most robust - shock, vibration
	SiT8918BE-31[1,2]	5032				
	SiT8918BE-21[1,2]	3225				
	SiT8918BE-11[1,2]	2520				
	SiT8918BE-71[1,2]	2016				
	SiT8918BA-81[1,2]	7050			-40 to +125 °C	Any frequency, shortest lead time Best stability (±20 ppm) at high temp Most robust - shock, vibration
	SiT8918BA-31[1,2]	5032				
	SiT8918BA-21[1,2]	3225				
	SiT8918BA-11[1,2]	2520				
	SiT8918BA-71[1,2]	2016				
	SiT8918BE-88[1,2]	7050		±30	-40 to +105 °C	Any frequency, shortest lead time Most robust - shock, vibration Small size
	SiT8918BE-38[1,2]	5032				
	SiT8918BE-28[1,2]	3225				
	SiT8918BE-18[1,2]	2520				
	SiT8918BE-78[1,2]	2016				
	SiT8918BA-88[1,2]	7050			-40 to +125 °C	Any frequency, shortest lead time Most robust - shock, vibration Small size
	SiT8918BA-38[1,2]	5032				
	SiT8918BA-28[1,2]	3225				
	SiT8918BA-18[1,2]	2520				
	SiT8918BA-78[1,2]	2016				

High Temperature MHz MEMS Oscillators					
Product	Part number	Package	Frequency	Frequency stability (ppm)	Temperature	Key Values

QFN packages

Product	Part number	Package	Frequency	Frequency stability (ppm)	Temperature	Key Values
SiT8919B	SiT8919BE-81[1,2]	7050	115 to 137 MHz	±20	-40 to +105 °C	High frequency, up to 137 MHz Best stability (±20 ppm) at high temp Most robust - shock, vibration
	SiT8919BE-31[1,2]	5032				
	SiT8919BE-21[1,2]	3225				
	SiT8919BE-11[1,2]	2520				
	SiT8919BE-71[1,2]	2016				
	SiT8919BA-81[1,2]	7050			-40 to +125 °C	High frequency, up to 137 MHz Best stability (±20 ppm) at high temp Most robust - shock, vibration
	SiT8919BA-31[1,2]	5032				
	SiT8919BA-21[1,2]	3225				
	SiT8919BA-11[1,2]	2520				
	SiT8919BA-71[1,2]	2016				
	SiT8919BE-88[1,2]	7050		±30	-40 to +105 °C	High frequency, up to 137 MHz Most robust - shock, vibration Small size
	SiT8919BE-38[1,2]	5032				
	SiT8919BE-28[1,2]	3225				
	SiT8919BE-18[1,2]	2520				
	SiT8919BE-78[1,2]	2016				
	SiT8919BA-88[1,2]	7050			-40 to +125 °C	High frequency, up to 137 MHz Most robust - shock, vibration Small size
	SiT8919BA-38[1,2]	5032				
	SiT8919BA-28[1,2]	3225				
	SiT8919BA-18[1,2]	2520				
	SiT8919BA-78[1,2]	2016				
SiT8920B	SiT8920BM-81[1,2]	7050	1 to 110 MHz	±20	-55 to +125 °C	Any frequency, shortest lead time Best stability (±20 ppm) over -55°C to +125°C Most robust - shock, vibration
	SiT8920BM-31[1,2]	5032				
	SiT8920BM-21[1,2]	3225				
	SiT8920BM-11[1,2]	2520				
	SiT8920BM-71[1,2]	2016				
	SiT8920BM-88[1,2]	7050		±30	-55 to +125 °C	Any frequency, shortest lead time Most robust - shock, vibration Small size
	SiT8920BM-38[1,2]	5032				
	SiT8920BM-28[1,2]	3225				
	SiT8920BM-18[1,2]	2520				
	SiT8920BM-78[1,2]	2016				
SiT8921B	SiT8921BM-81[1,2]	7050	115 to 137 MHz	±20	-55 to +125 °C	High frequency, up to 137 MHz Best stability (±20 ppm) over -55°C to +125°C Most robust - shock, vibration
	SiT8921BM-31[1,2]	5032				
	SiT8921BM-21[1,2]	3225				
	SiT8921BM-11[1,2]	2520				
	SiT8921BM-71[1,2]	2016				
	SiT8921BM-88[1,2]	7050		±30	-55 to +125 °C	High frequency, up to 137 MHz Most robust - shock, vibration Small size
	SiT8921BM-38[1,2]	5032				
	SiT8921BM-28[1,2]	3225				
	SiT8921BM-18[1,2]	2520				
	SiT8921BM-78[1,2]	2016				

Notes:

1. Parts can be ordered as programmed or unprogrammed. For part numbering, please refer the following.

Programmed parts: Determine the part number using the part number generator

Unprogrammed parts: Determine the part number with the table 1 plus the table 4 or the table 6 in the Unprogrammed part datasheet (Datasheet is attached in the end of this pricebook).

2. Field programmable parts can be programmed by SiTime Time Machine programmer. See Oscillator Programmer section about details.

Features & benefits of all SiTime devices

a. 3 year warranty

b. Best reliability - over 1 billion hours MTBF

c. Best quality - less than 2 DPPM

d. MEMS technology offers best shock and vibration immunity

e. RoHS and REACH compliant, lead-free, Halogen-free and Antimony-free

f. Available in 1KU and 3KU reels only for best cost

g. SiTime's devices are marked with lot code information only. There is no logo or frequency marking on the device.

Spread Spectrum MHz MEMS Oscillators							
Product	Part number	Package	Supply Voltage (V)	Frequency	Frequency stability (ppm)	Temperature	Key Values
SiT9003	SiT9003AI-83-33[2,3]	7050	3.3	1 to 110 MHz	±50	-40 to +85 °C	Industry's lowest power SSXO Single-chip EMI reduction Clock Pin-to-pin compatible with SPXO
	SiT9003AI-83-18[2,3]		1.8				
	SiT9003AI-33-33[2,3]	5032	3.3				
	SiT9003AI-33-18[2,3]		1.8				
	SiT9003AI-23-33[2,3]	3225	3.3				
	SiT9003AI-23-18[2,3]		1.8				
	SiT9003AI-13-33[2,3]	2520	3.3				
	SiT9003AI-13-18[2,3]		1.8				

Notes:

1. SiT9003 supports any stability from ±50 ppm to ±100 ppm over both -20°C to +70°C and -40°C to +85°C

2. Parts can be ordered as programmed or unprogrammed. For part numbering, please refer the following.

Programmed parts: Determine the part number using the part number generator

Unprogrammed parts: Determine the part number with the table 3 and the table 5 in the Unprogrammed part datasheet (Datasheet is attached in the end of this pricebook).

3. Field programmable parts can be programmed by SiTime Time Machine programmer. See Oscillator Programmer section about details.

Features & benefits of all SiTime devices

a. 3 year warranty

b. Best reliability - over 1 billion hours MTBF

c. Best quality - less than 2 DPPM

d. MEMS technology offers best shock and vibration immunity

e. RoHS and REACH compliant, lead-free, Halogen-free and Antimony-free

f. Available in 1KU and 3KU reels only for best cost

g. SiTime's devices are marked with lot code information only. There is no logo or frequency marking on the device.