





IMTECH Business



Check! OPQR

Innovation, Research and development based on the needs of customers. This is the customer-oriented **OPQR product philosophy** at **IMTECH.**



Mega Optimized

Provide optimized Crystal Oscillators adapted to the needs of markets and customers



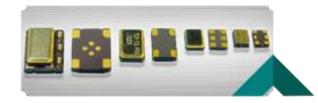
Competitive Price

Support customer's business by setting competitive prices



High Quality

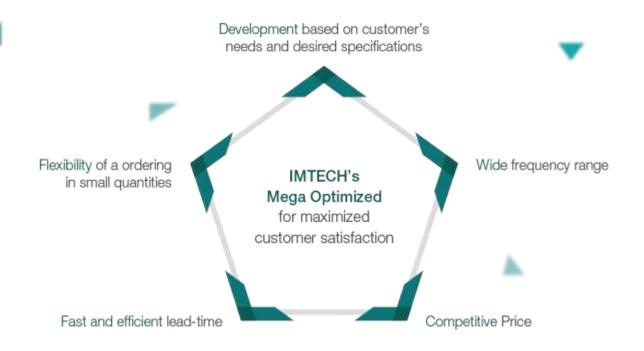
Increase customer satisfaction with High-frequency, Low Phase noise, and good aging characteristics



Full Range

Offer a wide range of frequency and a wide variety of packages to be adapted for all applications

Mega Optimized





Aiming for maximized customer satisfaction,

IMTECH materializes Mega optimized service through product development based on customer specifications, the ability to fill small orders, a variety of products, fast and efficient lead-time, and a reasonable price.

Competitive Price



By producing with a mass production lines, decreasing defect using automated equipments, and having own production line of BLANK for SMD Crystals,

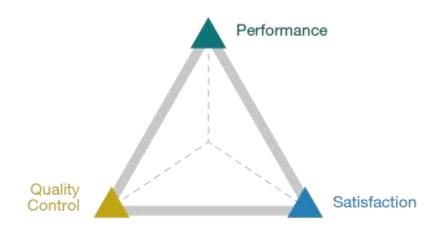
We can offer Oscillators that are 5%~10% less expensive than those of our competitors in Korea, China and Taipei.

O

High Frequency and PCB types of Oscillators

Our own production line of UM-1 Crystal create cost-savings. Oscillators that are at least 20%~30% less expensive than those of our competitors in the USA, Japan and Europe, will allow your business to expand.

High Quality



In order to provide the best quality products for high customer satisfaction, we put our best effort into developing superior performance products and conduction strict quality control.

In the case that complaints or defects are reported, We follow a professional and systematic process to provide quality satisfaction service through a quick and accurate response.

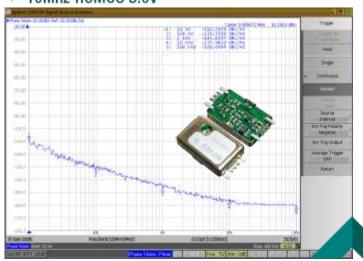
Quality Control Index

	products	Shipments (unit: K pcs)	Defects occurred Qty (unit :pcs)	Solution	Rate of defect (unit : ppm)
	TCXO	2,500	0	Replace	0
2014	VCXO	520	4	Replace	7
2014	Crystal	12,200	6	Replace	0.49
	Oscillator	4,300	9	Replace	2
	TCXO	1,800	3	Replace	1.6
2042	VCXO	480	5	Replace	10
2013	Crystal	10,500	11	Replace	1.0
	Oscillator	3,800	8	Replace	2.1
	TCXO	650	2	Replace	3.0
2040	VCXO	350	27	Replace	8.5
2012	Crystal	5,500	11	Replace	2.0
	Oscillator	2,600	5	Replace	1.9

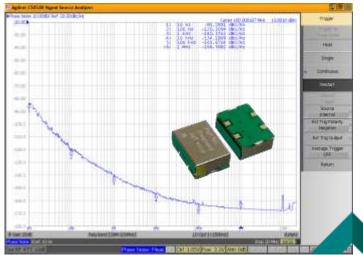
High Quality

Performance The Oscillators produced by IMTECH have a high phase noise performance

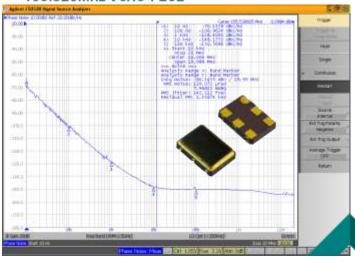
▼ 10Mhz HCMOS 5.0V



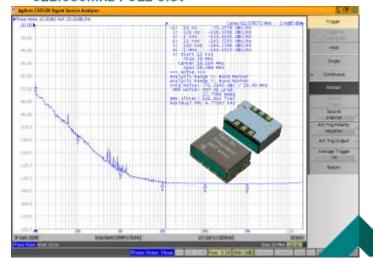
100Mhz TTL 3.3V



155.520Mhz VCXO PECL



622.080Mhz PCEL 3.3V



High Quality

Performance The Oscillators produced at IMTECH satisfy the customer's needs through good aging characteristics

Accelerated Aging Data of 14M7456 SMD TCXO | SMD TCXO 3.2mm X 2.5mm 0 -0.2 -0.4 -0.6 -0.8 -1 -1.2 1 Day 1Year 2Year 3Year 4Year 5Year -0.25 -0.5 -0.63 -0.77 -0.9 0 ____2 -0.22 0 -0.44 -0.46 -0.61 ___3 -0.06 -0.36 -0.53 -0.62 -0.73 0 -×-4 0 -0.28 -0.57 -0.79 -0.79-0.92 0 -0.72 -0.95 -0.42-0.89-0.99 -0.23 -0.48 -0.55 -0.69 -0.8 0 0 -0.37 -0.58 -0.16 -0.48-0.62 0 -0.28 -0.69 -0.89 -1.05 -0.720 -0.07 -0.43 -0.57 -0.64 -0.72 ----10 0 -0.05 -0.58 -0.4 -0.42 -0.55

^{**} The aging performance depends on the frequency and model

Full Range

Smart Phone

DSC/PDA

From the lower frequency of 32.768Khz Tuning Fork to the higher freq. of 622.080Mhz PECL, IMTECH is supplying and developing Oscillators.

IMTECH will continue to develop Oscillators in various kinds of packages and specification characteristics adapted for the needs of customers.



Switching, PCI-Express,

Base station.

Ethernet

Test Equipment,

Base station, Ethernet.

Base station.

Test Equipment,

Ethernet, SONET.

Smart Phone, WiMAX,

Wireless set.

Products Line-up

TCXO

Temperature Compensated Crystal Oscillator

- With Low-cost, tight stability of +/-0.5ppM, SMD TCXOs are available in a wide variety of packages
- With good Phase Noise, PCB types of TCXO are produced in a wide range of frequency

Crystal

✓ Tight tolerance up to +/- 5ppM, low-cost and short lead-time
are possible with a very tiny package



VCXO

Voltage controlled Crystal Oscillator

- PCB types of SMD VCXO, 10Mhz to 622M080, with good Phase noise and tight stability are available in various packages & logics
- With Fundamental Mode at a low cost, Ceramic SMD types of VCXO, 2.048Mhz to 54Mhz, are available
- In high frequency and Ultra low phase noise, Ceramic SMD VCXOs, 1Mhz to 160Mhz, are available

Oscillator

- Ceramic SMD Oscillators up to 2520 package and 54Mhz are available at a low cost
- In high frequency and Low RMS Jitter, Ceramic SMD Oscillators are available. The frequency range is up to 312M500 with LV-PECL

Products I Oscillators

FA Model

IMTECH produce oscillators in a wide range of packages and output types including HCMOS, True Sinewave, LVPECL.

14 X 10 x 5.2 typ

	Model	Dimensions(mm)	Frequency	Logic	Stability	Voltage
₩	2520 Oscillator	2.5 X 2.0 x 0.65 max	1.00Mhz to 54Mhz	HCMOS	-	3.3V ~1.8V
\triangle	Model	Dimensions(mm)	Frequency	Logic	Stability	Voltage
	3225 Oscillator	3.2 X 2.5 x 0.9 max	1.00Mhz to 125Mhz	HCMOS	-	3.3V ~1.8V
	Model	Dimensions(mm)	Frequency	Logic	Stability	Voltage
	5032 Oscillator	5.0 X 3.2 x 1.2 max	1.00Mhz to 312.5Mhz	HCMOS, LV-PECL	-	3.3V ~1.8V
12.	Model	Dimensions(mm)	Frequency	Logic	Stability	Voltage
	7050 Oscillator	7.0 X 5.0 x 1.8 max	1.00Mhz to 312.5Mhz	HCMOS, LV-PECL	-	5.0V ~1.8V
	Model	Dimensions(mm)	Frequency	Logic	Stability	Voltage

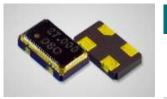
2.048Mhz to 622.080Mhz

TTL, LV-PECL,

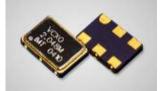
Clipped Sine wave, Pure Sine Wave 5.0V ~ 3.3V

Products I VCXO

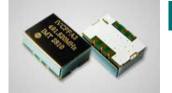
IMTECH Voltage Controlled Crystal Oscillators(VCXOs) are produced with CMOS, LVPECL, LVDS or True Sine Wave outputs in a wide variety of packages and specification characteristics.



Model	Dimensions(mm)	Frequency	Logic	Stability	Voltage
5032 VCXO	5.0 X 3.2 x 1.2 max	1.00Mhz to 80Mhz	HCMOS, LV-PECL	-	3.3V



Model	Dimensions(mm)	Frequency	Logic	Stability	Voltage
7050 VCXO	7.0 X 5.0 x 1.5 max	1.00Mhz to 170Mhz	HCMOS, LV-PECL	-	3.3V



Model	Dimensions(mm)	Frequency	Logic	Stability	Voltage
FA Model	14 X 10 x 5.2 typ	2.048Mhz to 622.080Mhz	TTL, LV-PECL, Clipped Sine wave, Pure Sine Wave	-	5.0V ~ 3.3V



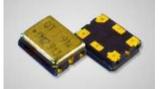
Model	Dimensions(mm)	Frequency	Logic	Stability	Voltage
TA Model	18.5 X 12 x 11 typ	2.048Mhz to 200.000Mhz	TTL, LV-PECL, Clipped Sine wave, Pure Sine Wave	-	5.0V ~ 3.3V

Products I TCXO

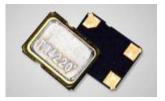
IMTECH Temperature Compensated Crystal Oscillators(TCXOs) are produced with CMOS, LVPECL, LVDS or Clipped Sine Wave outputs in a wide variety of packages and specification characteristics.

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130	0		
1		7	

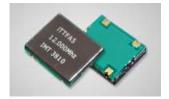
Model	Dimensions(mm)	Frequency	Logic	Stability	Voltage
2016 TCXO	2.0 X 1.6 x 1.0 max	19.200Mhz to 52Mhz	Clipped Sine Wave	+/-0.5ppM	3.3V ~2.5V



Model	Dimensions(mm)	Frequency	Logic	Stability	Voltage
2520 TCXO	2.5 X 2.0 x 1.0 max	16.000Mhz to 50Mhz	Clipped Sine Wave	+/-0.5ppM	3.3V ~2.5V



Model	Dimensions(mm)	Frequency	Logic	Stability	Voltage
3225 TCXO	3.2 X 2.5 x 1.0 max	10.000Mhz to 40Mhz	Clipped Sine Wave	+/-0.5ppM	3.3V ~2.5V



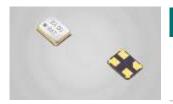
Model	Dimensions(mm)	Frequency	Logic	Stability	Voltage
FA Model TCXO	11.4 X 9.6 x 2.5 max	10.000Mhz to 40Mhz	HCMOS, Clipped Sine Wave	+/-2.5ppM	3.3V, 5.0V



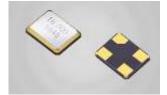
Model	Dimensions(mm)	Frequency	Logic	Stability	Voltage
TC Model TCXO	18.5 X 11.8 x 5.2 typ	2.048Mhz to 40Mhz	HCMOS, Clipped Sine Wave, Pure Sine wave	+/-2.5ppM	3.3V, 5.0V

Products I Crystal Unit

IMTECH manufacture a wide range of quartz crystals to suit virtually all applications, including high frequency, low frequency and small SMD miniature packages.



Model	Dimensions(mm)	Frequency	Logic	Tolerance	Voltage
1612 Crystal	1.6 X 1.2 x 0.4 max	24.00Mhz to 48Mhz	-	+/-5.0ppM	-



Model	Dimensions(mm)	Frequency	Logic	Tolerance	Voltage
2520 Crystal	2.5 X 2.0 x 0.65 max	12.00Mhz to 48Mhz	-	+/-5.0ppM	-



Model	Dimensions(mm)	Frequency	Logic	Tolerance	Voltage
3225 Crystal	3.2 X 2.5 x 0.75 max	8.00Mhz to 125Mhz	-	+/-5.0ppM -	-



Model	Dimensions(mm)	Frequency	Logic	Tolerance	Voltage
5032 Crystal	5.0 X 3.2 x 0.9 max	8.00Mhz to 125Mhz	-	+/-5.0ppM	-



Model	Dimensions(mm)	Frequency	Logic	Tolerance	Voltage
49SM Crystal	11.5 X 5.0 x 3.5 max	3.00Mhz to 90Mhz	-	+/-10.0ppM	-

Products I Crystal Unit

IMTECH manufacture a wide range of quartz crystals to suit virtually all applications, including high frequency, low frequency and small SMD miniature packages.



Model	Dimensions(mm)	Frequency	Logic	Tolerance	Voltage
1610 Tuning Fork	1.6 X 1.0 X 0.6	32.768Khz	-	-	-



Model	Dimensions(mm)	Frequency	Logic	Tolerance	Voltage
2012 Tunin Fork	2.0 X 1.2 X 0.6	32.768Khz	-		



Model	Dimensions(mm)	Frequency	Logic	Tolerance	Voltage
3215 Tuning Fork	3.2 X 1.5 X 0.9	32.768Khz	-	-	-



Model	Dimensions(mm)	Frequency	Logic	Tolerance	Voltage
7015 Tunging Fork	7.0 X 1.5 X 1.3	32.768Khz	-		

IMTECH Facility











Company Overview



IMTECH Overview

Established

January 03, 2004

CEO

Peter Shin, Frank Oh

Main products

XO, VCXO, TCXO, Crystal

Contacts

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Certification



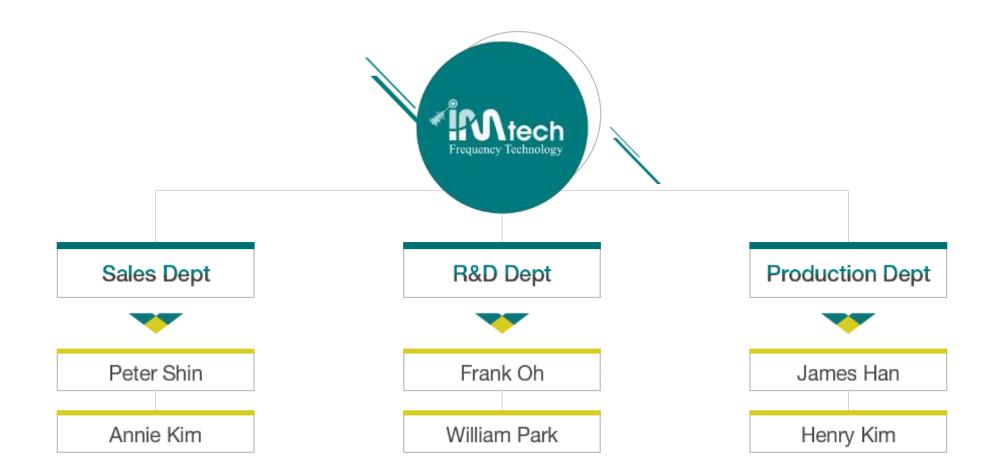


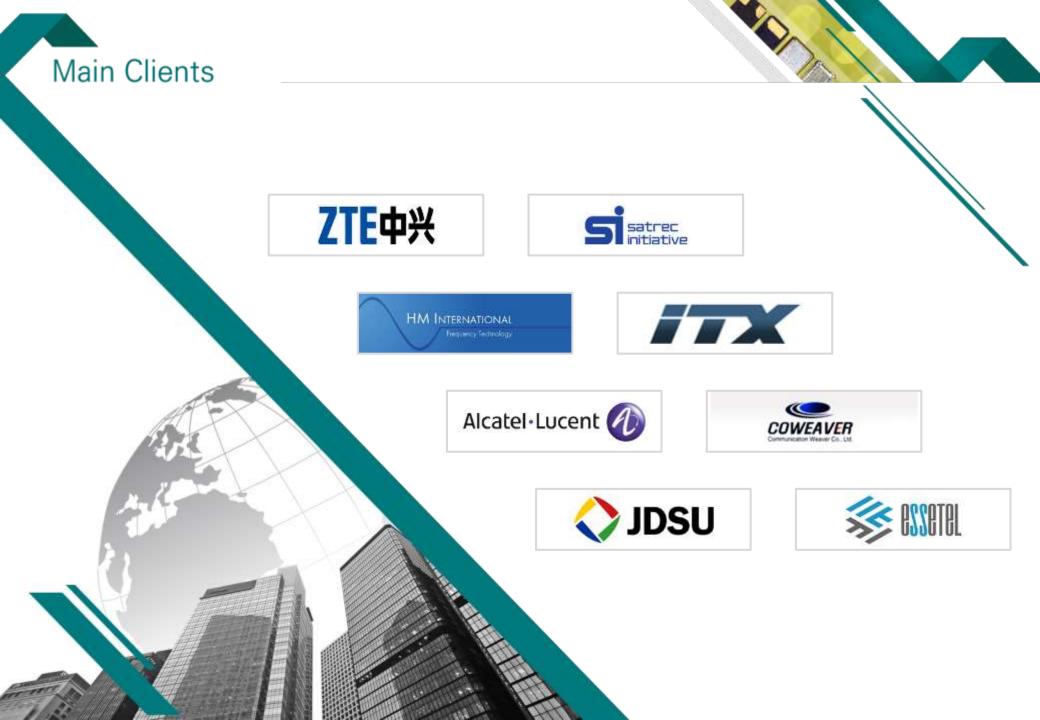


RoHS



Organization





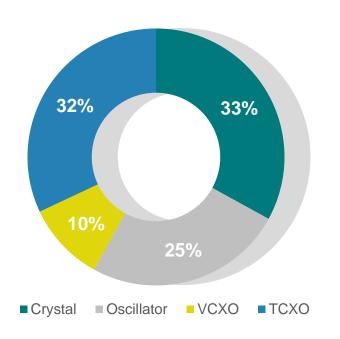
Sales

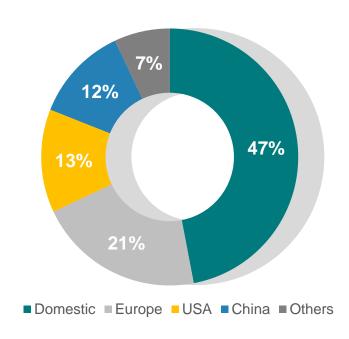
IMTECH has been rapidly progressing by steadily developing new products and supporting a variety of products.

To satisfy more customers and the needs of the market, IMTECH will continue to respond quickly and with flexibility to the needs of the rapidly changing communications markets and IT products.

In cooperation with overseas manufacturers who produce SMD Oscillators with competitive price and high quality, we were able to secure new customers and increase sales in 2014.

Year	2010	2011	2012	2013	2014
K USD	3,700	3,500	3,000	3,800	4,500









OPQR achieving customer satisfaction
We at IMTECH look forward to meeting with you

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