



TAITIEN

**QUARTZ CRYSTAL
CRYSTAL OSCILLATOR
VCXO
VTCXO / TCXO
OCXO
TIMING MODULE**



**TAIWAN
EXCELLENCE
2006**



Our Performance, Your Reputation

Our Products

Timing Module
Ave. 1ppt

OCXO
0.06-200ppb

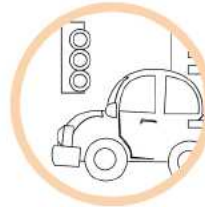
TCXO
0.1-2ppm

**Crystal Oscillators/
VCXO**
25-100ppm

Crystal Units
10-100ppm



GNSS : TCXO, OCXO, Timing Module
- GPS / Beidou (BDS) / Galileo / GLONASS
- QZSS / IRNSS
- LEO/MEO/GEO
- Positioning and Tracking



Automotive : X'TAL, XO, TCXO
- Mobile data center
- GNSS
- Infotainment
- EV charger
- ADAS
- Connected Car



Data Center : X'TAL, XO, TCXO
- Server
- Switch
- Storage
- PON



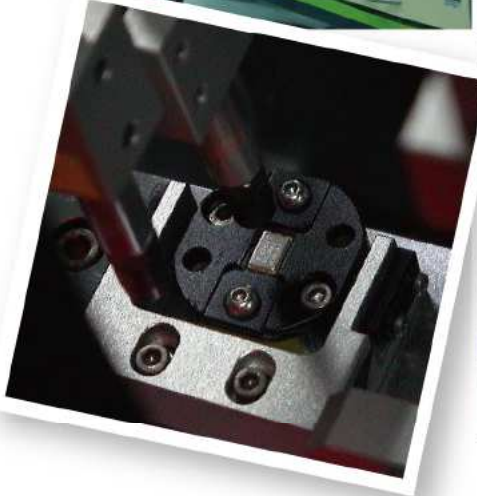
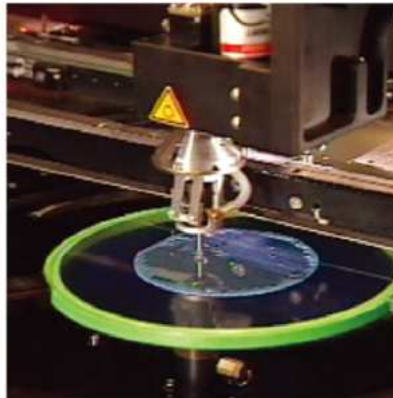
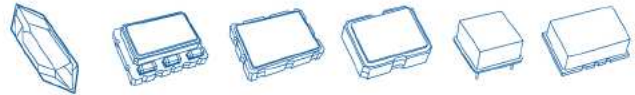
Consumer : X'TAL, XO
- Audio, Player, Speaker, Microphone, Web Camera, CCD
- Video, Display & TV(FPD/FTF LCD)
- Notebook
- DESKTOP
- All in One
- IPC
- Printer



Telecom :
X'TAL, XO, TCXO,
OCXO, Timing Module
- CPE, Small cell
- RU / DU / CU
- Fronthaul machine
- Backhaul machine



Networking :
X'TAL, XO, TCXO
- Gateway
- AP / Router
- HUB
- AIoT



Maintain sustainable competitive advantage from the satisfaction of customers, shareholders and employees

Taitien Electronics, a Quartz Frequency Control Product (FCP) solution provider, started its first production run of Tuning Fork Crystal in 1976. Our main products include XTAL, OSC, VCXO, TCXO, and is the first manufacturer in Taiwan that provides the technique of OCXO and inverted mesa (Qmesa) quartz resonator. Taitien service is capable of addressing one-stop procurement for all FCP requirements.

Our missions are

- 1 Provide our customer with quality Frequency Control Products at competitive price.
- 2 Create knowledge from the integration of information technology and educational training.
- 3 Maintain our quality through continuous improvement; challenge the goal of zero defects.
- 4 Focus product innovation on our core technology.
- 5 To be a world-class Frequency Control Products manufacturer, building network of strategic alliances with quality resources to maintain our market competitiveness.

Quality System Certification



Crystal Units



TYPE	PACKAGE	FREQ. RANGE	FEATURE
X4	 1.2 x 1.0 x 0.3mm Ceramic SMD	32MHz~100MHz	 Miniature
X3	 1.65 x 1.25 x 0.3mm Ceramic SMD	24MHz~100MHz	 Miniature
XZ	 2.05 x 1.65 x 0.45mm Ceramic SMD	12MHz~100MHz	 AEC-Q Qualified  Wide Temp. Range
XY	 2.5 x 2.0 x 0.45mm Ceramic SMD	12MHz~54MHz	 AEC-Q Qualified  Wide Temp. Range
XX	 3.2 x 2.5 x 0.7mm Ceramic SMD	8MHz~60MHz	 AEC-Q Qualified  Wide Temp. Range

Tuning Fork Crystal Units



TYPE	PACKAGE	FREQ. RANGE	FEATURE
XB	 1.0 x 1.6mm 2.0 x 6.0mm Through Hole	32.768kHz	 Low Power  Miniature
XA	 3.0 x 8.0mm Through Hole	32.768kHz	 Low Power
XD	 1.2 x 1.0 x 0.5mm Ceramic SMD	32.768kHz	 AEC-Q Qualified  Low Power  Wide Temp. Range  Miniature
XD	 3.2 x 1.5 x 0.9mm Ceramic SMD	32.768kHz	 AEC-Q Qualified  Low Power  Wide Temp. Range

FASTXO Crystal Oscillators (CMOS Output)



TYPE	PACKAGE	FREQ. RANGE	OUTPUT	FEATURE
PZ-U	 2.05 x 1.65 x 0.75mm Ceramic SMD	1 MHz~200MHz	CMOS	 Wide Temp. Range  Fast Delivery  AEC-Q Qualified  Miniature
PY-U	 2.5 x 2.0 x 0.81mm Ceramic SMD	1 MHz~200MHz	CMOS	 Wide Temp. Range  Fast Delivery  AEC-Q Qualified
PX-U	 3.2 x 2.5 x 0.95mm Ceramic SMD	1 MHz~200MHz	CMOS	 Wide Temp. Range  Fast Delivery
PV-U	 5.0 x 3.2 x 1.2mm Ceramic SMD	1 MHz~200MHz	CMOS	 Wide Temp. Range  Fast Delivery
PC-U	 7.0 x 5.0 x 1.3mm Ceramic SMD	1 MHz~200MHz	CMOS	 Wide Temp. Range  Fast Delivery




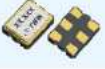












Crystal Oscillators (CMOS Output)



TYPE	PACKAGE	FREQ. RANGE	OUTPUT	FEATURE
O3	 1.65 x 1.25 x 0.8mm Ceramic SMD	3MHz~60MHz	CMOS	  Low Power Miniature
OZ	 2.05 x 1.65 x 0.75mm Ceramic SMD	32.768kHz~50MHz	CMOS	  Low Power AEC-Q Qualified
OY	 2.5 x 2.0 x 0.81mm Ceramic SMD	32.768kHz~125MHz	CMOS	   Low Power AEC-Q Qualified Wide Temp. Range
OX	 3.2 x 2.5 x 0.95mm Ceramic SMD	32.768kHz~125MHz	CMOS	   Low Power AEC-Q Qualified Wide Temp. Range
OV	 5.0 x 3.2 x 1.2mm Ceramic SMD	13.7kHz~160MHz	CMOS	  High Frequency AEC-Q Qualified
OC	 7.0 x 5.0 x 1.3mm Ceramic SMD	13.7kHz~166MHz	CMOS	  High Frequency AEC-Q Qualified













FASTXO Crystal Oscillators (LVPECL/LVDS/HCSL/CML Output)



TYPE	PACKAGE	FREQ. RANGE	OUTPUT	FEATURE
ON-K	 2.5 x 2.0 x 1.0mm Plastic Molding	15MHz~2.1GHz 15MHz~700MHz	LVPECL / LVDS / CML HCSL	    High Frequency Fast Delivery Low Phase Noise Miniature
OA-M	 3.2 x 2.5 x 0.9mm Ceramic SMD	10MHz~1.5GHz	LVPECL / LVDS	  High Frequency Fast Delivery
OM-K	 3.2 x 2.5 x 1.0mm Plastic Molding	15MHz~2.1GHz 15MHz~700MHz	LVPECL / LVDS / CML HCSL	   High Frequency Fast Delivery Low Phase Noise
OW-M	 5.0 x 3.2 x 1.25mm Ceramic SMD	10MHz~1.5GHz	LVPECL / LVDS	  High Frequency Fast Delivery
OJ-M	 5.0 x 3.2 x 1.4mm Ceramic SMD	15MHz~2.1GHz 15MHz~700MHz	LVPECL / LVDS / CML HCSL	   High Frequency Fast Delivery Low Phase Noise
OT-M	 7.0 x 5.0 x 1.45mm Ceramic SMD	10MHz~1.5GHz	LVPECL / LVDS	  High Frequency Fast Delivery
OD-M	 7.0 x 5.0 x 1.7mm Ceramic SMD	15MHz~2.1GHz 15MHz~700MHz	LVPECL / LVDS / CML HCSL	   High Frequency Fast Delivery Low Phase Noise

Crystal Oscillators (LVPECL/LVDS/HCSL Output)



TYPE	PACKAGE	FREQ. RANGE	OUTPUT	FEATURE
OO-U	 2.0 x 1.6 x 0.7mm Ceramic SMD	100MHz~160MHz	LVPECL/LVDS/HCSL	  Low Phase Noise Miniature
OB-U	 2.5 x 2.0 x 0.92mm Ceramic SMD	100MHz~160MHz	LVPECL/LVDS/HCSL	 Low Phase Noise
OA-U	 3.2 x 2.5 x 0.9mm Ceramic SMD	13.5MHz~220MHz	LVPECL/LVDS/HCSL	  Low Phase Noise AEC-Q Qualified
OW-U	 5 x 3.2 x 1.25mm Ceramic SMD	13.5MHz~220MHz	LVPECL/LVDS/HCSL	 Low Phase Noise
OT-U	 7 x 5 x 1.45mm Ceramic SMD	13.5MHz~220MHz	LVPECL/LVDS/HCSL	 Low Phase Noise

Voltage Controlled Temperature Compensated Crystal Oscillators



TYPE	PACKAGE	FREQ. RANGE	OUTPUT	FEATURE
TZ	 2.0 x 1.6 x 0.7mm Ceramic SMD	10MHz~52MHz	Clipped Sine Wave	 High Precision  Miniature  Low Power
TY	 2.5 x 2.0 x 0.7mm Ceramic SMD	10MHz~52MHz	Clipped Sine Wave	 High Precision  AEC-Q Qualified
TY-J	 2.5 x 2.0 x 0.85mm Ceramic SMD	9.5MHz~60MHz	CMOS	 Low Power  AEC-Q Qualified  Wide Temp. Range
TX-D	 3.2 x 2.5 x 0.36mm Ceramic SMD	32.768KHz	CMOS	 Low Power
TX	 3.2 x 2.5 x 0.9mm Ceramic SMD	10MHz~52MHz	Clipped Sine Wave	 High Precision  AEC-Q Qualified
TX-J	 3.2 x 2.5 x 0.95mm Ceramic SMD	9.5MHz~60MHz	CMOS	 Low Power  AEC-Q Qualified  Wide Temp. Range
TP	 3.2 x 2.5 x 1.35mm Ceramic SMD	5MHz~52MHz	CMOS / Clipped Sine Wave	 High Precision  Stratum 3  Low g-sensitivity
TX-P	 3.2 x 2.5 x 1.6mm Ceramic SMD	10MHz~1.5GHz	CMOS / LVPECL / LVDS	 High Frequency  Fast Delivery
TV-P	 5.0 x 3.2 x 1.4mm Ceramic SMD	15MHz~2.1GHz	CMOS / LVPECL / LVDS HCSL / CML	 High Precision  High Frequency
TL	 5.0 x 3.2 x 1.85mm Ceramic SMD	5MHz~52MHz	CMOS / Clipped Sine Wave	 High Precision  Stratum 3  Wide Temp. Range
TW	 5.0 x 3.2 x 1.85mm Ceramic SMD	10MHz~52MHz	CMOS / Clipped Sine Wave	 High Precision  Stratum 3  AEC-Q Qualified  Wide Temp. Range
TS	 7.0 x 5.0 x 1.9mm Ceramic SMD	5MHz~52MHz	CMOS / Clipped Sine Wave	 High Precision  Stratum 3  Wide Temp. Range
TT	 7.0 x 5.0 x 1.9mm Ceramic SMD	5MHz~52MHz	CMOS / Clipped Sine Wave	 High Precision  Stratum 3  Wide Temp. Range
TT-L	 7.0 x 5.3 x 2.3mm Metal Cover, FR-4 PCB Based SMD	10MHz~52MHz	CMOS / Clipped Sine Wave	 Low g-sensitivity  Low Phase Noise
TK	 14.3 x 9.6 x 6.5mm Metal Cover, FR-4 PCB Based SMD	40MHz~150MHz	CMOS / Sine Wave	 High Precision  Low Power  Low Phase Noise

Voltage Controlled Crystal Oscillators



TYPE	PACKAGE	FREQ. RANGE	OUTPUT	FEATURE
VN-K	 2.5 x 2.0 x 1.0mm Plastic Molding	15MHz~2.5GHz 15MHz~700MHz	LVPECL / LVDS / CML HCSL	 Low Phase Noise  High Frequency  Wide Pulling
VA-M	 3.2 x 2.5 x 0.9mm Ceramic SMD	10MHz~250MHz	CMOS	 Fast Delivery
VM-K	 3.2 x 2.5 x 1.0mm Plastic Molding	15MHz~2.5GHz 15MHz~700MHz	LVPECL / LVDS / CML HCSL	 Low Phase Noise  High Frequency  Wide Pulling
VW-M	 5.0 x 3.2 x 1.25mm Ceramic SMD	10MHz~1.5GHz	CMOS	 Fast Delivery  High Frequency
VJ-M	 5.0 x 3.2 x 1.4mm Ceramic SMD	15MHz~2.1GHz	CMOS / LVPECL / LVDS / CML / HCSL	 Fast Delivery  High Frequency  Wide Pulling
VT-M	 7.0 x 5.0 x 1.45mm Ceramic SMD	10MHz~1.5GHz	CMOS	 Fast Delivery  High Frequency
VD-M	 7.0 x 5.0 x 1.7mm Ceramic SMD	15MHz~2.1GHz	CMOS / LVPECL / LVDS / CML / HCSL	 Fast Delivery  High Frequency  Wide Pulling
VL	14.0 x 9.0 x 3.6mm Metal Can SMD	50MHz~125MHz	CMOS / Sine Wave	Low Phase Noise Low g-sensitivity

For more details, please visit our website at www.taitien.com








Oven Controlled Crystal Oscillators



TYPE	PACKAGE	FREQ. RANGE	OUTPUT	FEATURE
NN	 9.7 x 7.5 x 4.1mm Plastic Can SMD	10MHz~40MHz	Rectangular / Clipped Sine Wave	 High Precision  Stratum 3E  Miniature
NK-N	 14.5 x 9.6 x 6.5mm Metal Can SMD	10MHz~40MHz	Rectangular	 High Precision  Stratum 3E
NK-H	 14.7 x 9.6 x 8.2mm Metal Can SMD	10MHz~40MHz	Rectangular	 High Precision  Stratum 3E
NF	 20.3 x 12.7 x 11.0mm Metal Can Through Hole	5MHz~40MHz	Rectangular	 High Precision  Stratum 3E  Fast Delivery
NQ	 20.3 x 12.7 x 11.0mm Metal Can SMD	5MHz~40MHz	Rectangular	 High Precision  Stratum 3E
NP	 20.6 x 20.6 x 11.0mm Metal Can Through Hole	5MHz~40MHz	Rectangular	 High Precision  Stratum 3E
NJ	 25.4 x 22.1 x 11.0mm Metal Can SMD	5MHz~100MHz	Rectangular / Sine Wave	 High Precision  Stratum 3E
NA	 25.4 x 25.4 x 12.7mm Metal Can Through Hole	5MHz~100MHz	LVTTTL / Sine Wave	 High Precision  Stratum 3E  Fast Delivery
NI	 36.3 x 27.2 x 12.7mm Metal Can Through Hole	5MHz~100MHz	LVTTTL / Sine Wave	 High Precision  Stratum 3E  Fast Delivery
NF-100M-6800	 20.3 x 12.7 x 11.0mm Metal Can Through Hole	100MHz	Rectangular / Sine Wave	 Low Phase Noise  Stratum 3E  High Frequency  Low g-sensitivity
NA-10M-6800	 25.4 x 25.4 x 12.7mm Metal Can Through Hole	10MHz	Sine Wave	 Low Phase Noise  Stratum 3E  High Precision  Low g-sensitivity
NA-100M-6700	 25.4 x 25.4 x 12.7mm Metal Can Through Hole	100MHz	Sine Wave	 Low g-sensitivity  Stratum 3E  High Frequency
NA-100M-6800	 25.4 x 25.4 x 12.7mm Metal Can Through Hole	100MHz	Sine Wave	 Low Phase Noise  Stratum 3E  High Frequency  Low g-sensitivity
NA-100M-6900	 25.4 x 25.4 x 12.7mm Metal Can Through Hole	100MHz	Sine Wave	 Low Phase Noise  Stratum 3E  High Frequency  Low g-sensitivity
NI-100M-6700	 36.3 x 27.2 x 12.7mm Metal Can Through Hole	100MHz	Sine Wave	 Low g-sensitivity  Stratum 3E  High Frequency
NI-10M-3500 Double Oven	 36.3 x 27.2 x 12.7mm Metal Can Through Hole	10MHz	Rectangular	 High Precision  Stratum 3E

Timing Module



TYPE	PACKAGE	FREQ. RANGE	OUTPUT	FEATURE
GT-11	 25.4 x 25.4 x 9.4mm Through Hole	10MHz	CMOS	 High Precision
DTA-450	 41.0 x 35.0 x 12.0mm Metal Can Through Hole	10MHz	CMOS	 High Precision  Low Power
DT-5151	 50.8 x 50.8 x 24mm Metal Can Through Hole	5,10MHz	CMOS	 High Precision

Taitien Electronics Co., LTD (Headquarters)

No.5, Shutan Street, Shulin Dist., New Taipei City 238, Taiwan, ROC
Tel: +886-2-2686-1287 Fax: +886-2-2681-9610

Taitien Electronics (Nanjing) Co., Ltd. / East China Office

Jiangning Economic & Technology Development Zone, No.18, Chi-Tian Road,
Nanjing, Jiangsu, China 211100
Tel: +86-025-5210-8713 Fax: +86-025-5210-2580

Taitien Electronics (Shenzhen) Co., Ltd. / South China Office

8F., Block 7, Nanyou Tian'an Industrial Estate, Nanshan Dist., Shenzhen,
Guangdong, China 518054
Tel: +86-755-2652-2955 Fax: +86-755-2605-2967

Wintron Electronics Co., Ltd.

Building 14, Zhongnan High-Tech Intelligent Electronics
Industrial Park, No.58 Qiaosong Street, Yinhe Subdistrict Office,
Zhengzhou Airport Economy Zone, Henan Province, China
451162
Tel: +86-371-8658-5690

Taitien U.S.A. Inc.

3720 Oceanic Way, Suite 210, Oceanside, CA 92056, USA
Tel: +1-510-252-0686 Fax: +1-510-252-0148

Colorado Crystal Corporation

2303 West 8th Street, Loveland, CO 80537, USA
Tel: +1-970-667-9248 Fax: +1-970-667-3500

Pletronics, Inc.

19013 36th Ave W Lynnwood, WA 98036
Tel: +1-425-776-1880 Fax: +1-425-776-2760



Website: www.taitien.com
E-mail: sales@taitien.com.tw

