



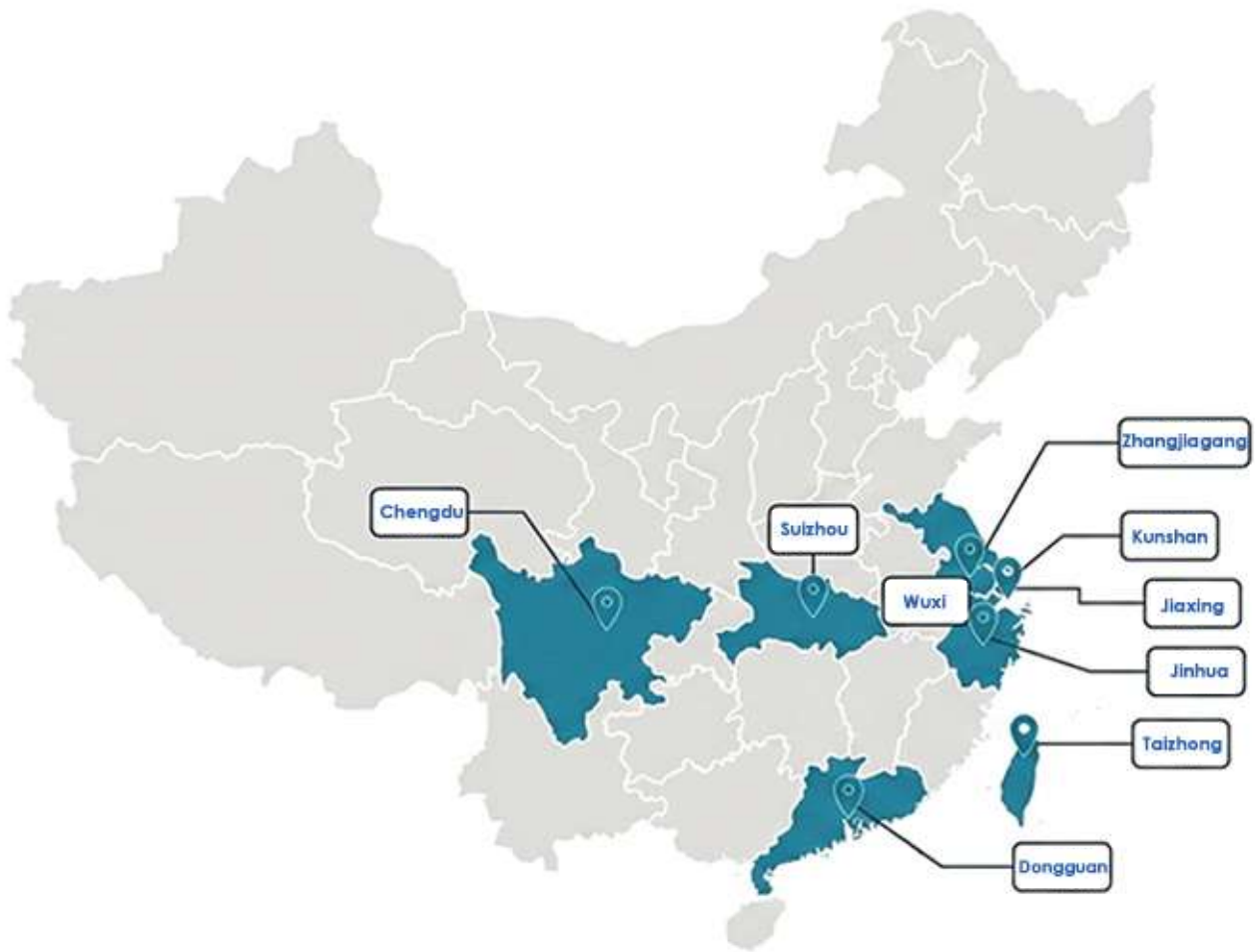
Automotive Grade



***Dongguan 2nd
Manufacturing
Base Catalog***



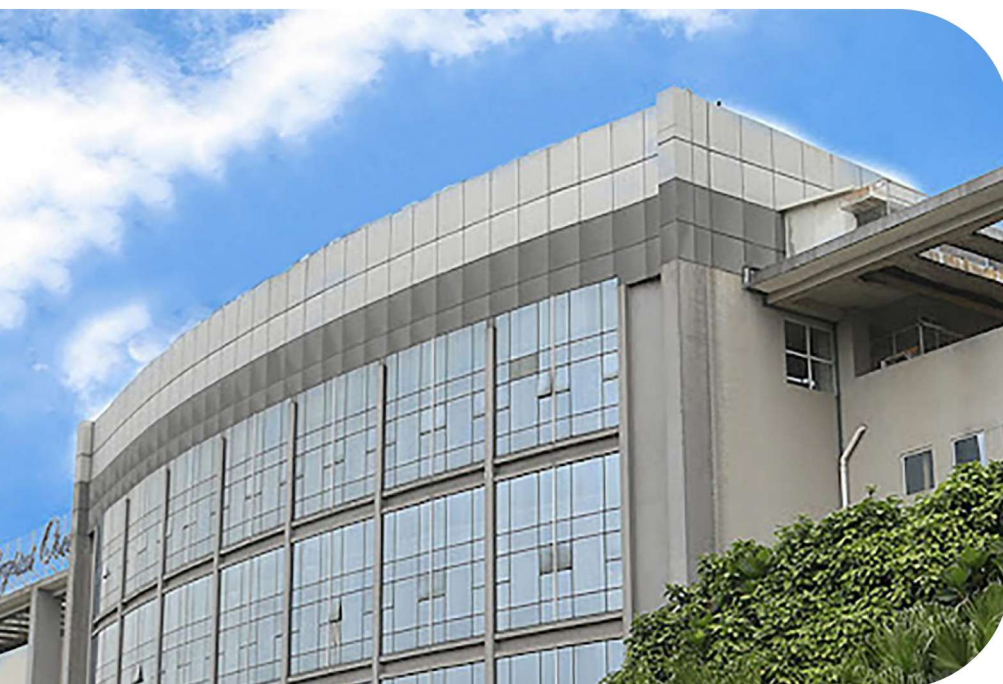
Manufacturing Footprint Map



WTL has deeply established its expertise in electronic components, with five production bases strategically located across nine cities in five provinces in China. Our facilities are situated in key industrial hubs across South China, East China, Central China, Southwest China, as well as Taiwan, leveraging a coordinated multi-base production network to integrate a full spectrum of product resources.

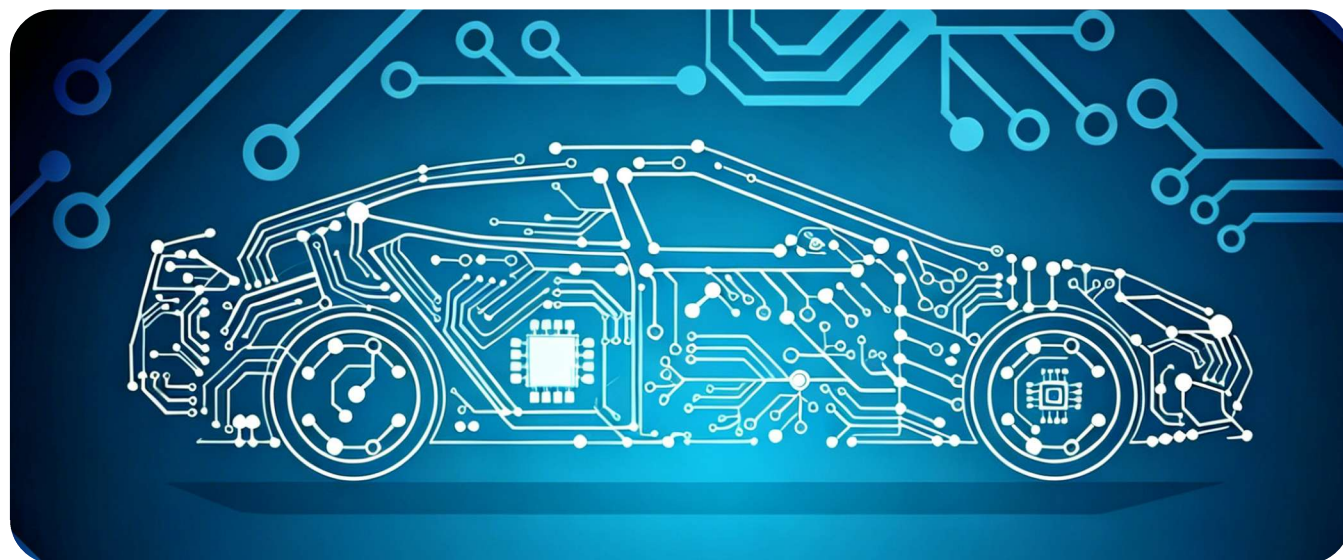
Backed by a well-structured production layout and robust supply chain capabilities, WTL offers a comprehensive product portfolio, complete specifications, and ample production capacity. We are fully equipped to meet diverse industry needs and application scenarios through one-stop procurement and customized solutions, while delivering stable, diversified, and end-to-end integrated solutions to our customers.

Rooted in China, Serving the Globe



Dongguan 2nd Manufacturing Base

Our “Dongguan 2nd Manufacturing Base” has long earned strong customer trust for its crystal oscillator products. In recent years, we have actively expanded into automotive-grade solutions to keep pace with the rapid growth of the global new energy vehicle market, meeting customers’ demand for high-end, high-precision components.



6. Automotive Products

6.1 Automotive (AEC - Q200)

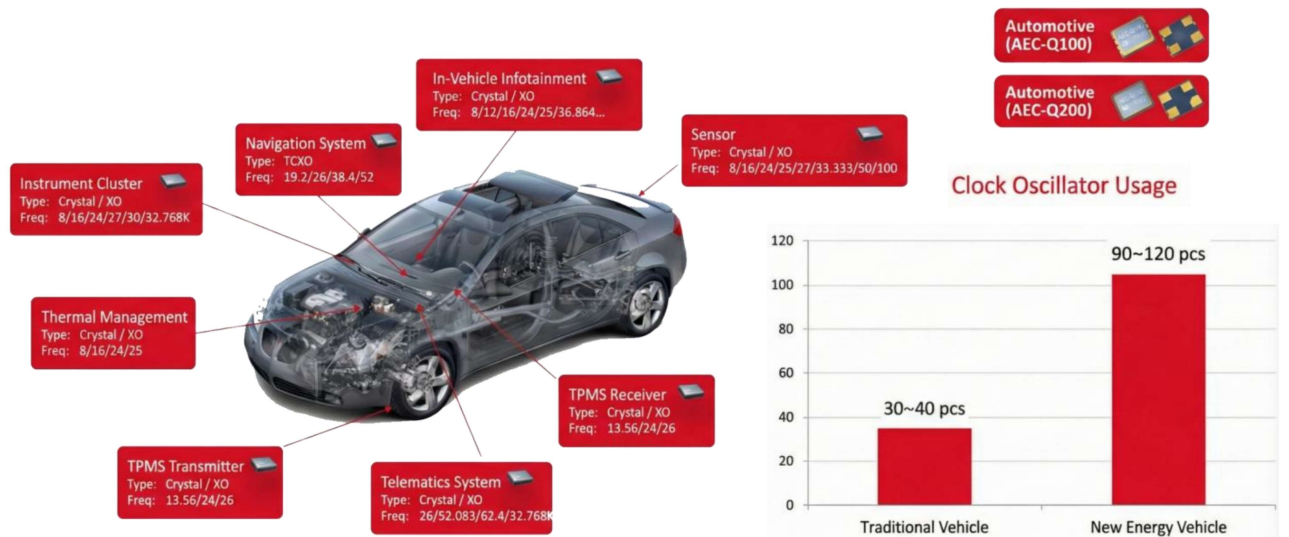
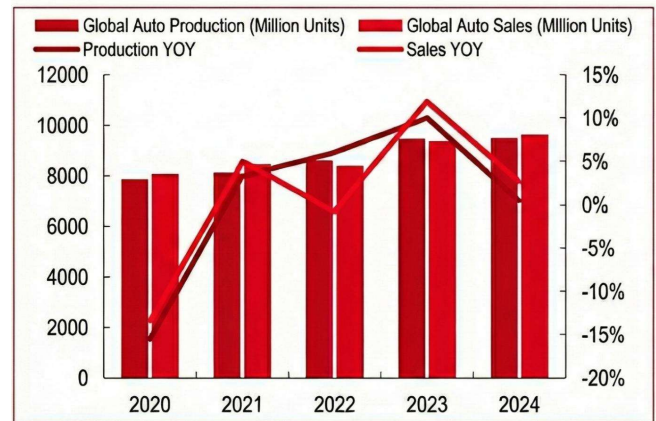
Series	Photo	Type	Dimension	Frequency Range	Vibration Mode	Grad	Application
9Y  		Seam 4 Pads	2.0*1.6 mm	16~60MHz	Fund.	G1	Info, Conn, Cluster, BCM, PEPS, ADAS, TPMS, BMS
2Y  		Seam 4 Pads	2.5*2.0 mm	16~60MHz	Fund.	G1	Info, Conn, Cluster, BCM, PEPS, ADAS, TPMS, BMS
3Y  		Seam 4 Pads	3.2*2.5mm	8~60MHz	Fund.	G1	Info, Conn, Cluster, BCM, PEPS, ADAS, TPMS, BMS
Series	Photo	Type	Dimension	Frequency Range	Vibration Mode	Grad	Application
9K  		TSX 4 Pads	2.0*1.6 mm	26/38.4MHz	Fund.	G1	Connectivity

6.2 Automotive (AEC - Q100)

Series	Photo	Type	Dimension	Frequency Range	Output Type	Grad	Application
9L  		Seam 4 Pads	2.0*1.6 mm	1~170 32.768KHz	CMOS	G1	Info, Conn, Cluster, BCM, PEPS, ADAS, TPMS, BMS
2L  		Seam 4 Pads	2.5*2.0 mm	1~170 32.768KHz	CMOS	G1	Info, Conn, Cluster, BCM, PEPS, ADAS, TPMS, BMS
3L  		Seam 4 Pads	3.2*2.5mm	1~170 32.768KHz	CMOS	G1	Info, Conn, Cluster, BCM, PEPS, ADAS, TPMS, BMS

As new energy vehicle (NEV) brands continue to evolve and achieve strong sales growth, demand for automotive-grade electronic components is rising rapidly, alongside increasingly stringent specification requirements. Certifications such as AEC-Q100 and AEC-Q200 have become the baseline standards.

WTL's Dongguan 2nd Manufacturing Base supports this growing demand by providing dedicated production capacity for automotive-grade electronic components, delivering reliable solutions to customers worldwide.



The world accelerates—
we're right in the driver's seat.

**WTL Crystal' s
Authentication Platform**



50 +
Platforms

300 +
Recognized
Materials



QUALCOMM

BES
恒玄科技

EIGENCOMM
More than connection

WUQIMicro

SANECIPS
中兴微电子

Rockchip
瑞芯微电子

HISILICON

AIROHA
络达科技股份有限公司

ESPRESSIF

芯驰 SemiDrive

unicorecomm
北斗星通旗下企业

华大北斗
ALLSTAR

紫光展锐
UNISOC SPREADTRON & BDA

REALTEK

ASR
MICROELECTRONICS

ambiq

XYSEMI

全志科技
Allwinner Technology

MEDIATEK

炬芯
Actions

GOODIX
汇顶科技

ESWIN

泰斗
Techtotop

amlogic 晶晨

Application in Smart Cockpit

HUD Display
Type: Crystal/XO
Freq: 24/25/27/48/50
Size: 2016/2520/3225

Remote control key
Type: Crystal
Freq: 16/27.12/27.6/32/40
Size: 1612/2016/2520/3225

PAD
Type: Crystal / XO/TF
Freq: 12/16/20/24/25/40/48/
32.768k
Size: 2016/2520/3225/3215

Radio/Audio
Type: Crystal / XO/TF
Freq: 12.288/24.576/24/36.864/
32.768k
Size: 2016/2520/3225/3215

Switch control
Type: Crystal / XO
Freq: 8/12/16/24/40
Size: 2016/2520/3225

Air Conditioning Control
Type: Crystal
Freq: 8/12/16/24/48
Size: 2016/2520/3225

Electronic gear shift control
Type: Crystal / XO
Freq: 8/12/16/20/24/40
Size: 2016/2520/3225

Digital key
Type: Crystal / TSX
Freq: 26/27.12/32/40/55.2
Size: 2016/2520/3225

GNSS positioning
Type: TSX / TCXO
Freq: 26/38.4/76.8/32.768K
Size: 2016/2520/3225/3215

T-box Network Communication
Type: Crystal / XO/ TCXO
Freq: 8/16/20/25/32/40
Size: 2016/2520/3225

Domain controller
Type: Crystal / XO
Freq: 16/24/25/40/48/50/100
Size: 2016/2520/3225



**From RFQ to ramp-up—
tell us, and we'll auto-mate your sourcing pipeline.**

Application in Electric Motor, Power Battery, and Electronic Control System

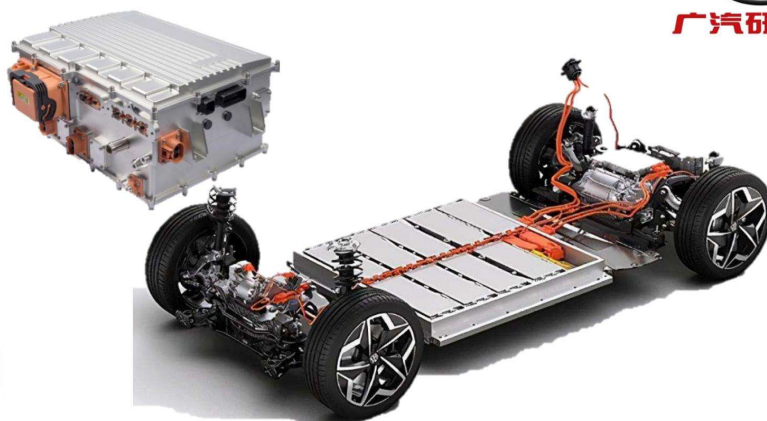
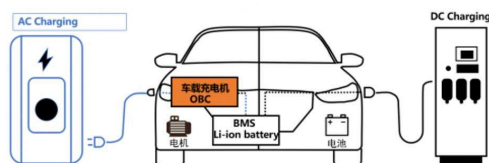
OBC
Type: Crystal / XO
Frequency: 10/10.24/16/20/24/25/40
Package size: 2016/2520/3225

Electronic Control System
Type: Crystal / XO
Frequency: 10/10.24/16/20/24/25/40
Package Size: 2016/2520/3225

Electric Motor
Type: Crystal / XO/TF
Frequency: 16/20/30/40
Package size: 2016/2520/3225/7050

ECU Control
Type: Crystal / XO
Frequency: 8/12/16/20/25/30/40
Package size: 2016/2520/3225

PTC Control
Type: Crystal / XO
Frequency: 16/20/40
Package size: 2520/3225



Product Reliability - CNAS Laboratory



Registration No.: CNAS L7388



WTL is one of the first companies in the domestic crystal industry to possess a **national-level CNAS laboratory***. In 2020, we were awarded the "China National Accreditation Service for Conformity Assessment Laboratory **Accreditation Certificate**".

The laboratory is equipped with **AEC-Q100** & **AEC-Q200** related standard testing equipment and instruments, safeguarding the reliability of automotive products.

WTL[®] Automotive Clients



2. Crystal Unit with Built-in Temperature Sensor

2.1 TSX

Series		Frequency Range	Description
1612 TSX RoHS Compliant Pb Free		19.2/26/38.4/52/76.8MHz	4 pads SMD seam sealed crystal unit with thermistor. - Ultra compact and thin (Thickness 0.65mm Max.). - Excellent frequency stability and hysteresis characteristics. - Excellent environmental and mechanical endurences.
2016 TSX RoHS Compliant Pb Free		19.2/26/38.4/52MHz	4 pads SMD seam sealed crystal unit with thermistor. - Available for reference clock of RF and GPS applications. - Excellent frequency stability and hysteresis characteristics. - Excellent environmental and mechanical endurences.
2520 TSX RoHS Compliant Pb Free		19.2/26MHz	4 pads SMD seam sealed crystal unit with thermistor. - Available for reference clock of RF and GPS applications. - Excellent frequency stability and hysteresis characteristics. - Excellent environmental and mechanical endurences.



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