

cooperation



win-win



Innovation



Xtaltq Technologies

www.xtaltq.com



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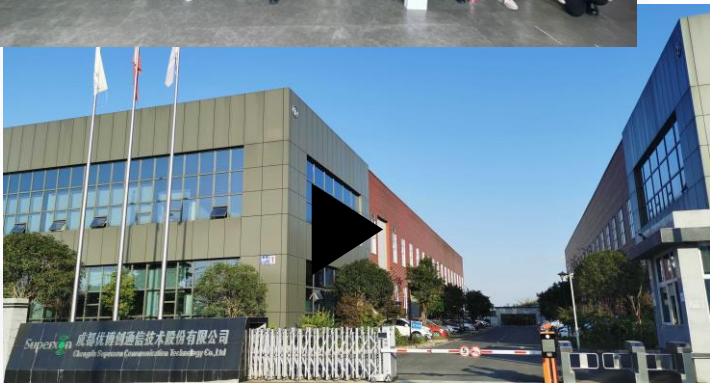


01

About US



Company profile



COMPANY PROFILE



Xtaltq Technologies Co., Ltd was founded in 2009 and located in Chengdu, China.



30 persons for R&D Team, 6 persons for QA and 10 persons for Sales Team



XtalTQ main Products: TCXO, OCXO, VCXO, VCO and PLL Module.



Company History



2009

2009.06
XtalTQ Founded

2010

2010.08
First Generation of
High Precision
TCXO

2011

2011.02
OCXO Products
Line Founded

2018

2018.05
High Frequency
and Low phase
BT0914&BT1120
Series is batch
production

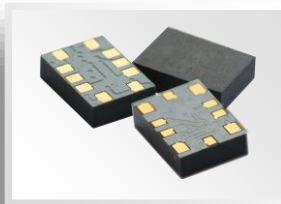
2021

2021.12
Phase noise module
and VCO started to
research



02

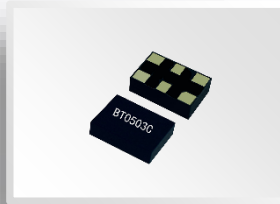
Technology & Products

**BT0507A&B**

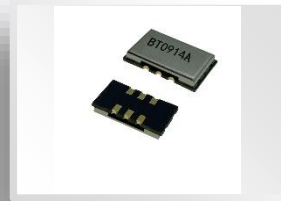
10~52MHz
 $\pm 0.5 \sim \pm 0.05\text{ppm}$
-55~+95°C
SMD 7mm×5mm

**BT0507E**

10~52MHz
 $\pm 0.5 \sim \pm 0.28\text{ppm}$
SMD 7mm×5mm

**BT0503C**

10~52MHz
 $\pm 0.5 \sim \pm 0.05\text{ppm}$
-55~+95°C
SMD 5.0mm×3.2mm

**BT0914**

10~125MHz
 $\pm 1.0 \sim \pm 0.05\text{ppm}$
SMD 14×9mm
**Low Phase Noise -
145dBc/1KHz(100MHz)**

**BT1220**

10~125MHz
 $\pm 1.0 \sim \pm 0.05\text{ppm}$
DIP 20×12mm
**Low Phase Noise -
145dBc/1KHz(100MHz)**



BO2525L/H

10~120MHz
±3ppb
160dBc/1KHz(10MHz)
DIP 25×25mm



BO2736L/H

10~120MHz
±1ppb
165dBc/1KHz(100MHz)
DIP 36×27mm



BO2020L/H

10~120MHz
±3ppb
160dBc/1KHz(100MHz)
DIP 20×20mm



BO1220L/H

10~120MHz
±5~±500ppb
150dBc/1KHz(10MHz)
DIP 20×12mm



VCXO

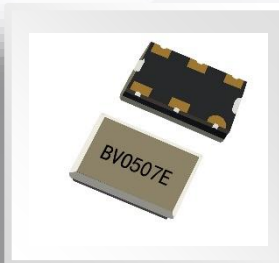


CVDH-950



BV0507D

10~156.52MHz
Freq. Pulling
Range:±40ppm
HCMOS
SMD 7mm×5mm



BV0507E

10~156.52MHz
Freq. Pulling
Range:±40ppm
LVDS/LVPECL
SMD 7mm×5mm



BV0914A

10~156.52MHz
Freq. Pulling
Range:±40ppm
LVDS/LVPECL
SMD 14×9mm



BV0914B

10~156.52MHz
Freq. Pulling
Range:±40ppm
HCMOS/Sinewave
SMD 14×9mm
Phase noise: -
145dBc/1KHz(100MHz)



BV1220

10~156.52MHz
Freq. Pulling
Range:±40ppm
HCMOS/Sinewave
DIP 20×12ppm



Vibration Insensitive TCXOs



BT0914A-Z

50~156.25MHz
 $\pm 0.28 \sim \pm 2$ ppm
SMD 14×9mm



BT1220-Z

50~156.25MHz
 $\pm 0.28 \sim \pm 2$ ppm
DIP 20×12mm



BT2020H-Z

50~156.25MHz
 $\pm 0.28 \sim \pm 2$ ppm
DIP 20×20mm



BT2525H-Z

50~156.25MHz
 $\pm 0.28 \sim \pm 2$ ppm
DIP 25×25mm



Vibration Insensitive TCXO-Phase Noise



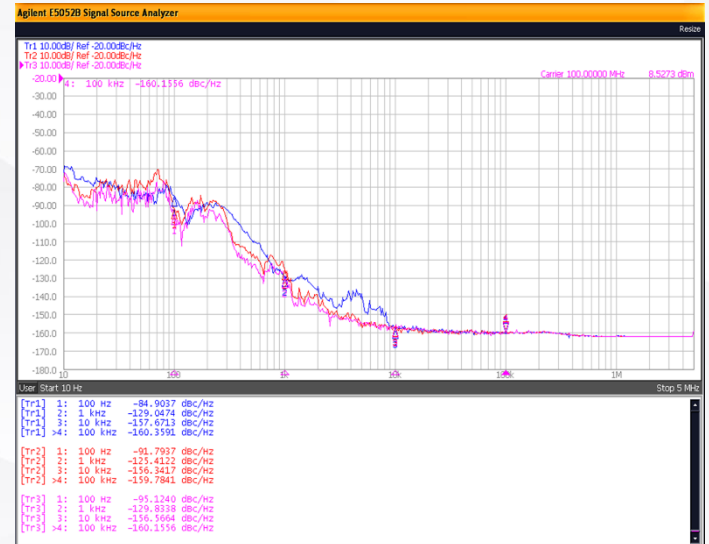
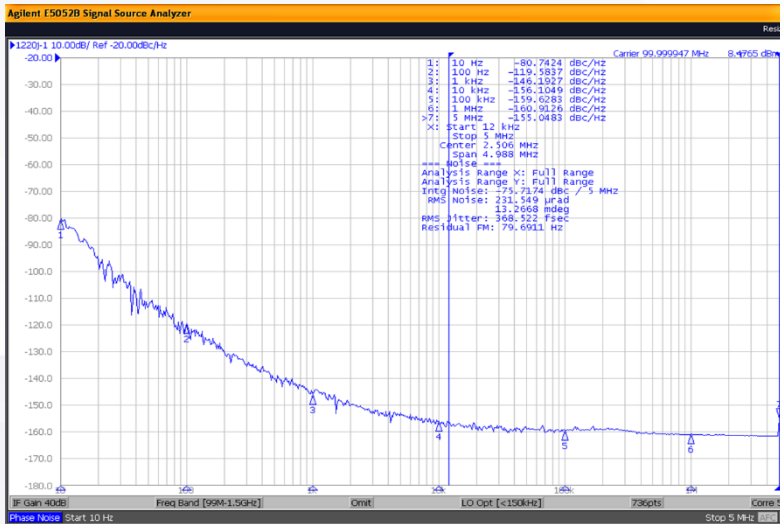
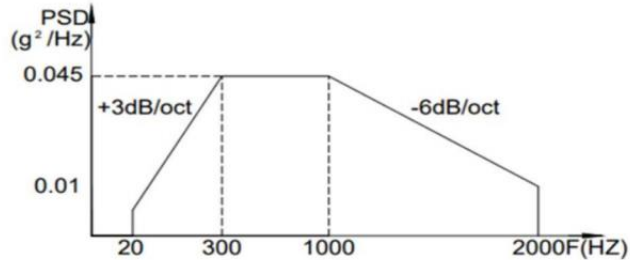
	BT0914A-Z	BT1220-Z	BT2020H-Z	BT2525H-Z		
Parameter	Typical Value				Unit	Conditions
Dimension	9.2mm x 14.2mm	12.6 x 20.2mm	20.2 x 20.2mm	25.4 x 25.4mm		
SSB Phase Noise@100MHz	-142	-142	-146	-146	dBc/Hz	Typ. Value Static phase noise at +25°C
	-110	-115	-129	-129		Typ. Value X-axis dynamic phase noise at +25°C
	-110	-115	-125	-125		Typ. Value Y-axis dynamic phase noise at +25°C
	-102	-102	-132	-129		Typ. Value Z-axis dynamic phase noise at +25°Cse)



Phase Noise-Vibration Insensitive TCXO



Vibration Condition



NEW



BT0507N

80~125MHz
 $\pm 0.28\text{ppm}(\text{min})$
SMD 7mm \times 5mm



BT0507E

10~62MHz
 $\pm 0.05(\text{min})$
SMD 7mm \times 5mm
Low Phase Noise: -
150dBc (50MHz)



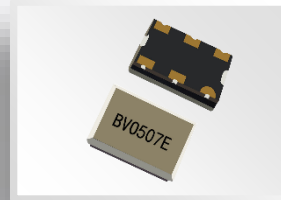
BO0907L

10~50MHz
 $\pm 5\text{ppb}(\text{min})$
SMD 9 \times 7mm
Small Size



BO0914

10~100MHz
 $\pm 3\text{ppb} \sim \pm 50\text{ppb}$
SMD 14.6 \times 10.4mm



BV0507E

10~62MHz
Freq Pulling Range
 $\pm 50\text{ppm}$
SMD 7mm \times 5mm
Low Phase Noise



Crystal Oscillators



	TCXO	XO	Resonator
SMD 2.0×1.6mm	±0.5ppm~±2.5ppm -40~+85°C	±10ppm~±50ppm -40~+125°C	±5ppm~±50ppm -40~+125°C
SMD 2.5×2.0mm	±0.5ppm~±2.5ppm -40~+85°C	±10ppm~±50ppm -40~+125°C	±5ppm~±50ppm -40~+125°C
SMD 3.2×2.5mm	±0.5ppm~±2.5ppm -40~+85°C	±10ppm~±50ppm -55~+125°C	±10ppm~±50ppm -55~+125°C

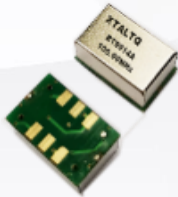
Others



VCO 20*20mm
Frequency Range: 400~ 800MHz
Freq. Vs temperature: 5MHz over -40~+85°C
Tuning Sensitivity: 47MHz/V
Phase Noise@10kHz : -104dBc
Phase Noise@100kHz: -125dBc



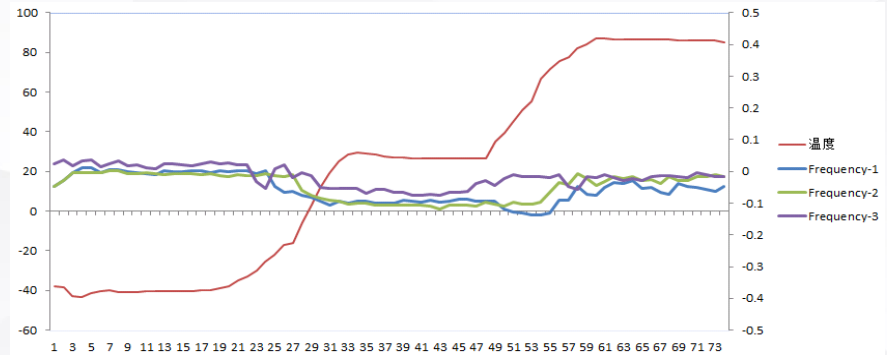
Phase Noise Module 57×74mm
Input Ref: 5MHz & 10MHz
Operating Temp: -40~+85°C
Output: Sinewave, HCMOS



PLXO 14×9mm
Frequency Range: 50~ 155.62MHz
Operating Temp: -40~+85°C
Output: Sinewave, HCMOS

Characteristics:

- Ultra frequency stability (0.05~0.1ppm)
- wide operating temperature (-55° ~95°)
- Use advanced IC sealing
- Low power consumption (1~5mA)
- High precision(0.05ppm)
- High aging level(0.3ppm/year)
- Wide frequency tuning range (Max ± 15 ppm)
- ESD(4KV)



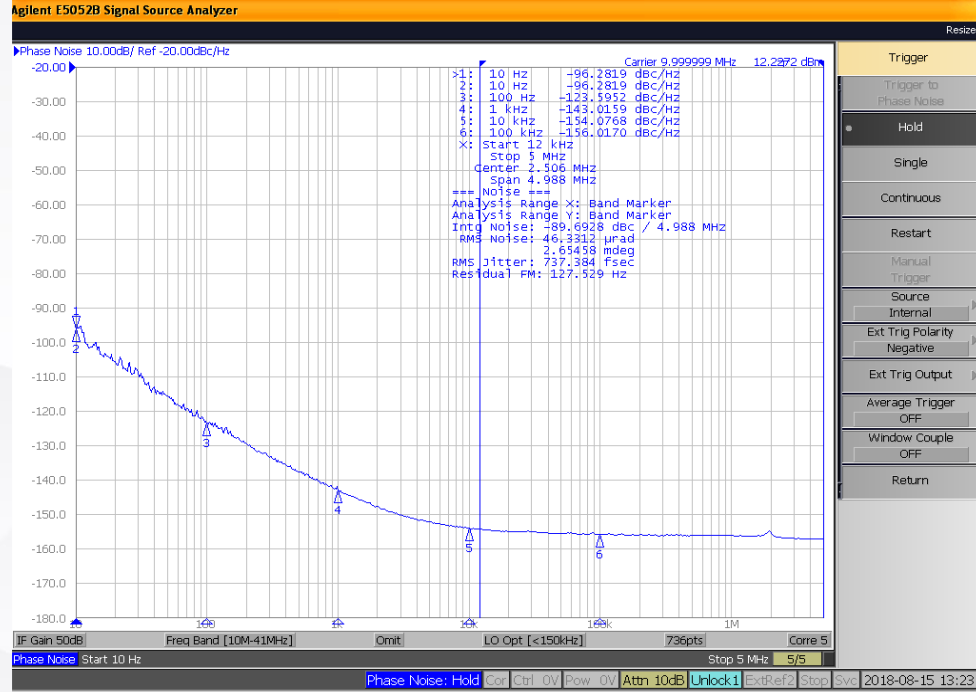
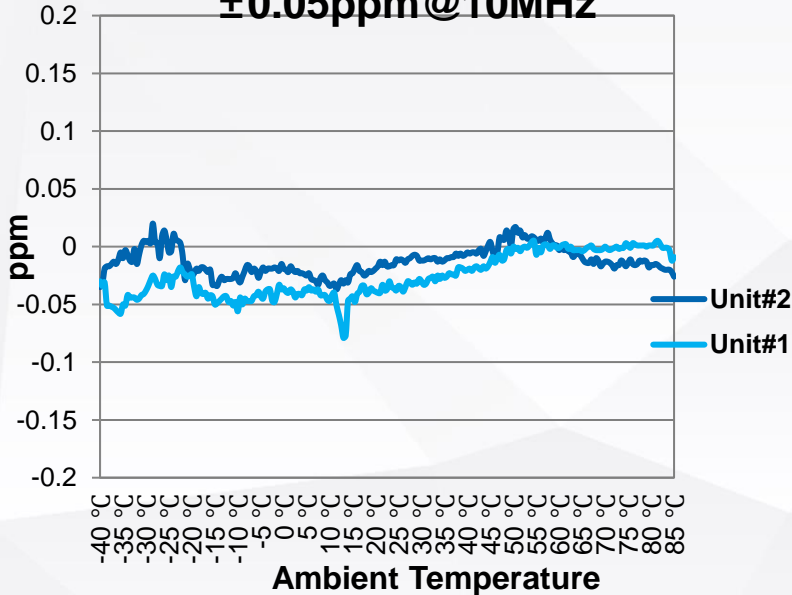


Test Data- TCXO Stability



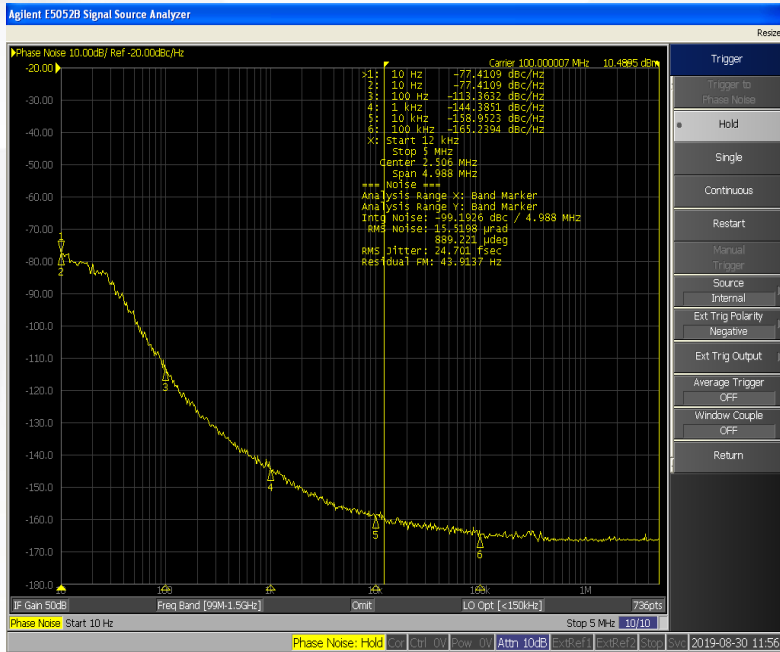
Freq. Stability Vs. Temp.

$\pm 0.05\text{ppm}@10\text{MHz}$

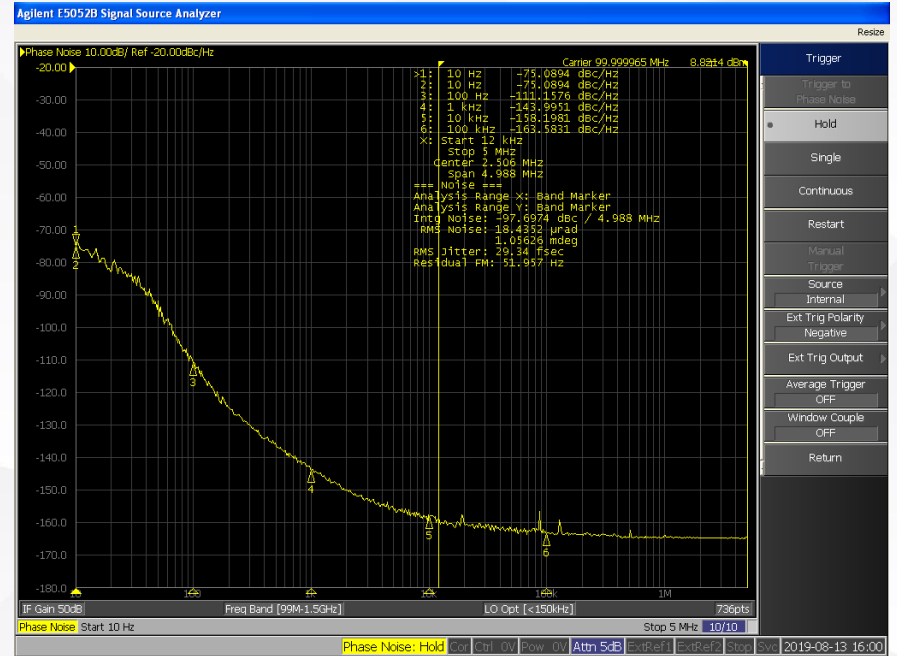




Test Data-TCXO Phase Noise



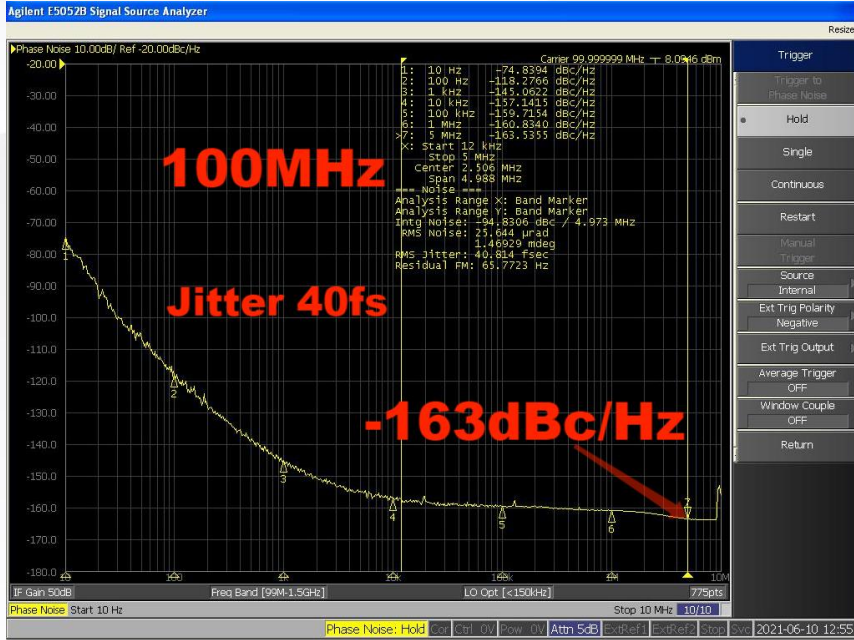
BT0914A@100MHz
-142dBc/1KHz



BT1220H@100MHz
-142dBc/1KHz



Test Data—VCXO Low Phase Noise



100MHz RMS Jitter 40fs



122.88MHz RMS Jitter 40fs



Application



Monitoring equipment



Network equipment



Base station



oscilloscope



Application

GNSS



oscillation



Military electronics



Communication



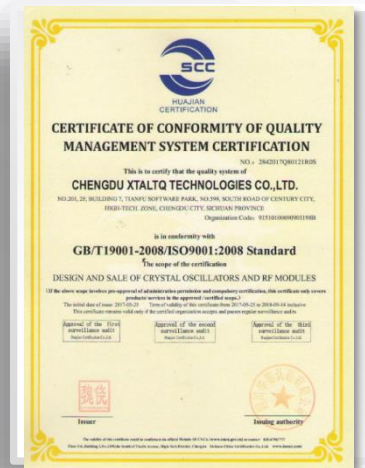


03

Quality



Certificate

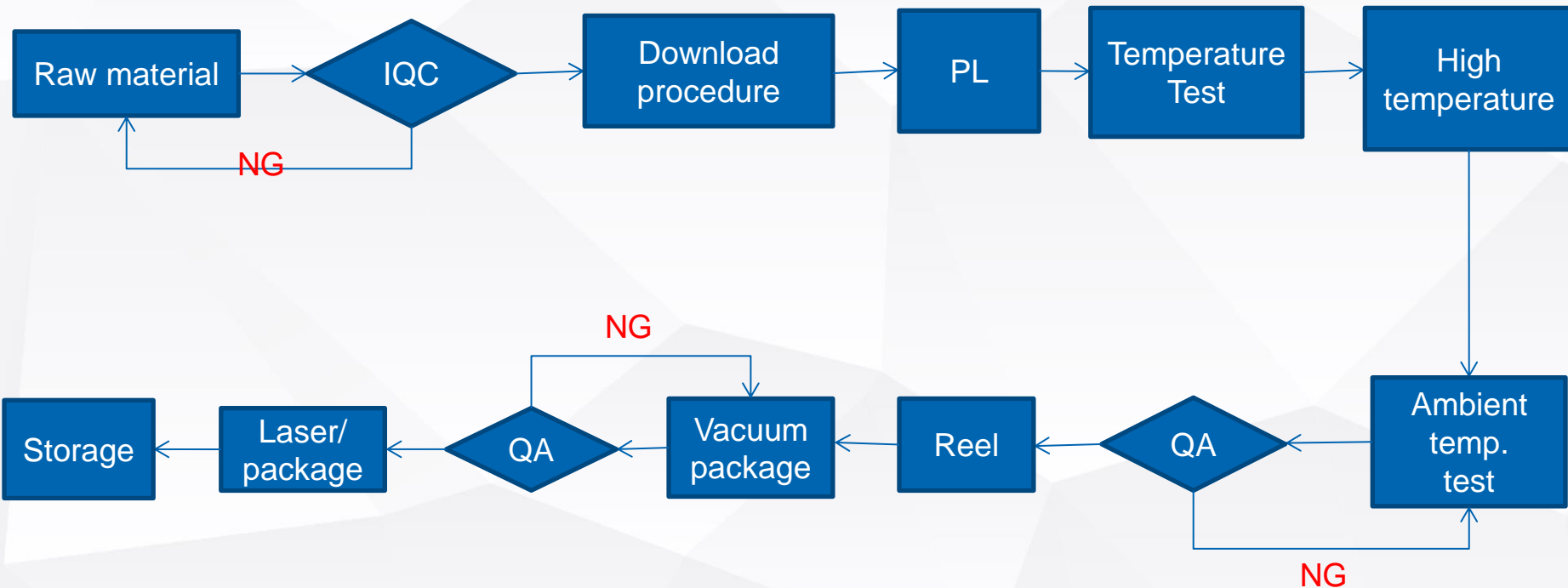


Standard & Certificate

Xtltq is operating in strict according to ISO enviromental system, and are in full compliance with ROHS standard.



Manufacturing process





QA process



- ✓ Control production process and manage equipment
- ✓ Quality certifications
- ✓ Provide test data
- ✓ Quality documents management

Test Experiment

- ✓ Temperature Cycling Test
- ✓ High/Low temperature storage Test
- ✓ Highly Accelerated stress Screening
- ✓ Temperature shock
- ✓ Random Vibration Test
- ✓ Mechanical Shock Test
- ✓ ESD Test
- ✓ Aging
- ✓ Packing Material Flame Retardation Test

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THANKS



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