



希華晶體科技股份有限公司
SIWARD CRYSTAL TECHNOLOGY CO., LTD.

ESTABLISHED IN MAY, 1988
AN ISO-9001 , ISO-14001 , TS16949 & OHSAS 18001
CERTIFIED COMPANY

Welcome

SIWARD GROUP

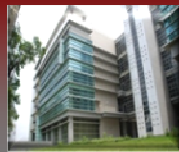


SIWARD GROUP
TAIWAN HQ

Concentric



SIWARD
JP



WAFER
MEMS



APEX
WUXI



USA
East coast



YONEZAWA



APEX
OPTECH



WuHan
factory



USA
West coast



TOKYO
OFFICE



SIWARD
STSP
Quartz Bar



SHENZHEN
OFFICE



Malaysia
Paneng

Group Factories Location



PAID - UP CAPITAL : USD 40,000,000.00
BUSINESS TYPE : MANUFACTURE
WORKERS : 750 Persons

–Taiwan (635 Persons)

Location : Taichung

Size : 20,010 Square Meter



– Japan (45 Persons)

Location : Yonezawa

Size : 10,457 Square Meter



– China (73 Persons)

Location : WuHan

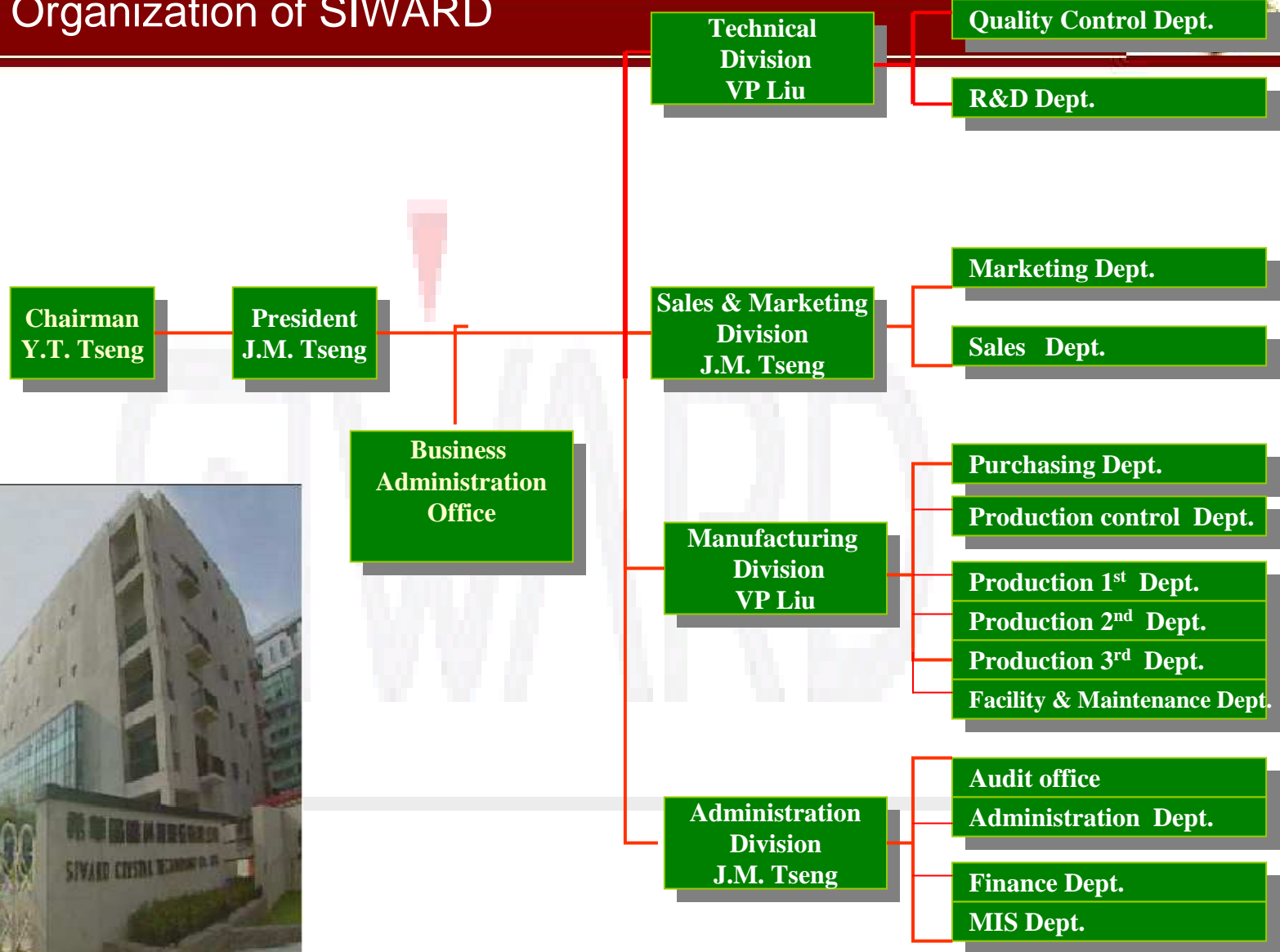
Size : 9,000 Square Meter

Major Products :

CRYSTAL 、 OSCILLATOR 、 TCXO 、 VCXO 、 Tune Fork



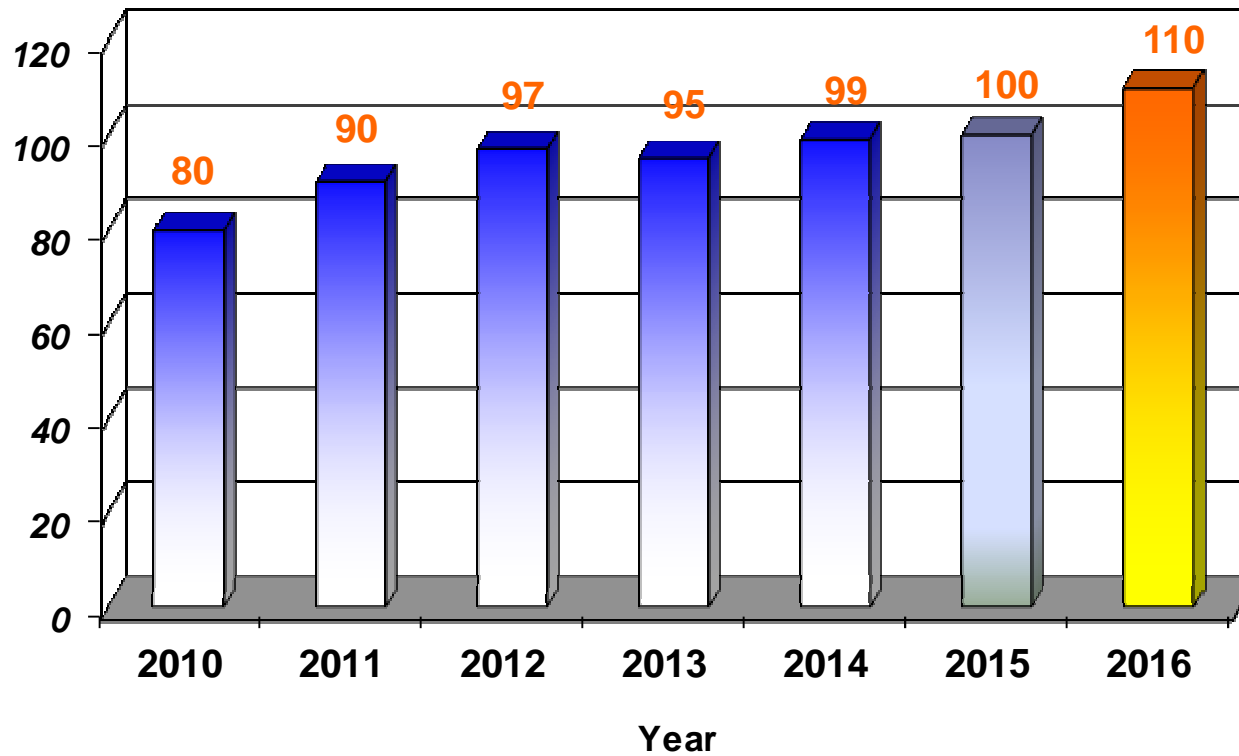
Organization of SIWARD



Annual Revenue



US\$ in Million



World Ranking (Millions of Dollars)



Revenue of Top 10 Crystal Device Manufactures, 2013 - 2014 (usd mln)

2013 Rank	2014 Rank	Company Name	Region	2014 Revenue	Percent of Total
1	1	Epson Toycom	Japan	449.00	14.10
2	2	NDK	Japan	417.00	13.10
3	3	TXC	Taiwan	323.00	10.10
4	4	KED	Japan	293.00	9.20
5	5	KDS	Japan	264.00	8.30
6	6	Vectron	USA	176.00	5.50
7	7	Siward	Taiwan	99.00	3.10
9	8	Hosonic	Taiwan	95.00	3.00
8	9	Rakon	New Zealand	71.00	2.20
	10	Failong	China	65.00	2.00
		Other Companies		938.00	29.40
		Total Revenues		3,190.00	100.00

CAPACITY



X'TAL	Seam SMD	80KK / M
	Glass SMD	7.5KK / M
	TF 32.768KHz	10KK / M
	DIP 49U/S	10KK / M
	SMD 49S	7.5KK / M
OSC	CMOS	15KK / M
	LVPECL / LVDS	5KK / M
VCXO	SMD	5KK / M
(VC)TCXO	SMD	5KK / M

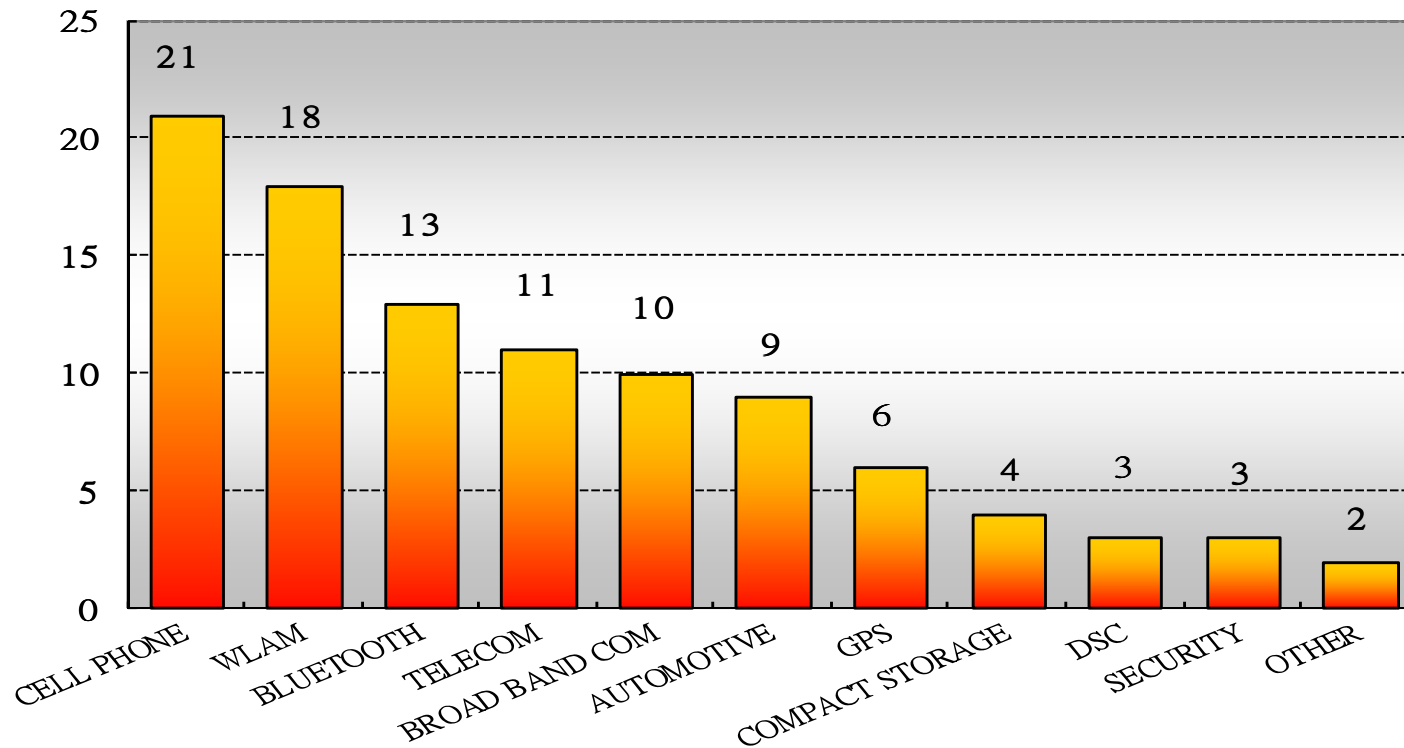




Major Application



(%)



Company Overview



Short Terms Strategy

- 2016 Q2 will expansion another small package SMD line & will provide another 5kk per mth
- 2016 Q2 will expansion Tune Fork SMD lines, will provide another 5kk/m

Long Terms Strategy

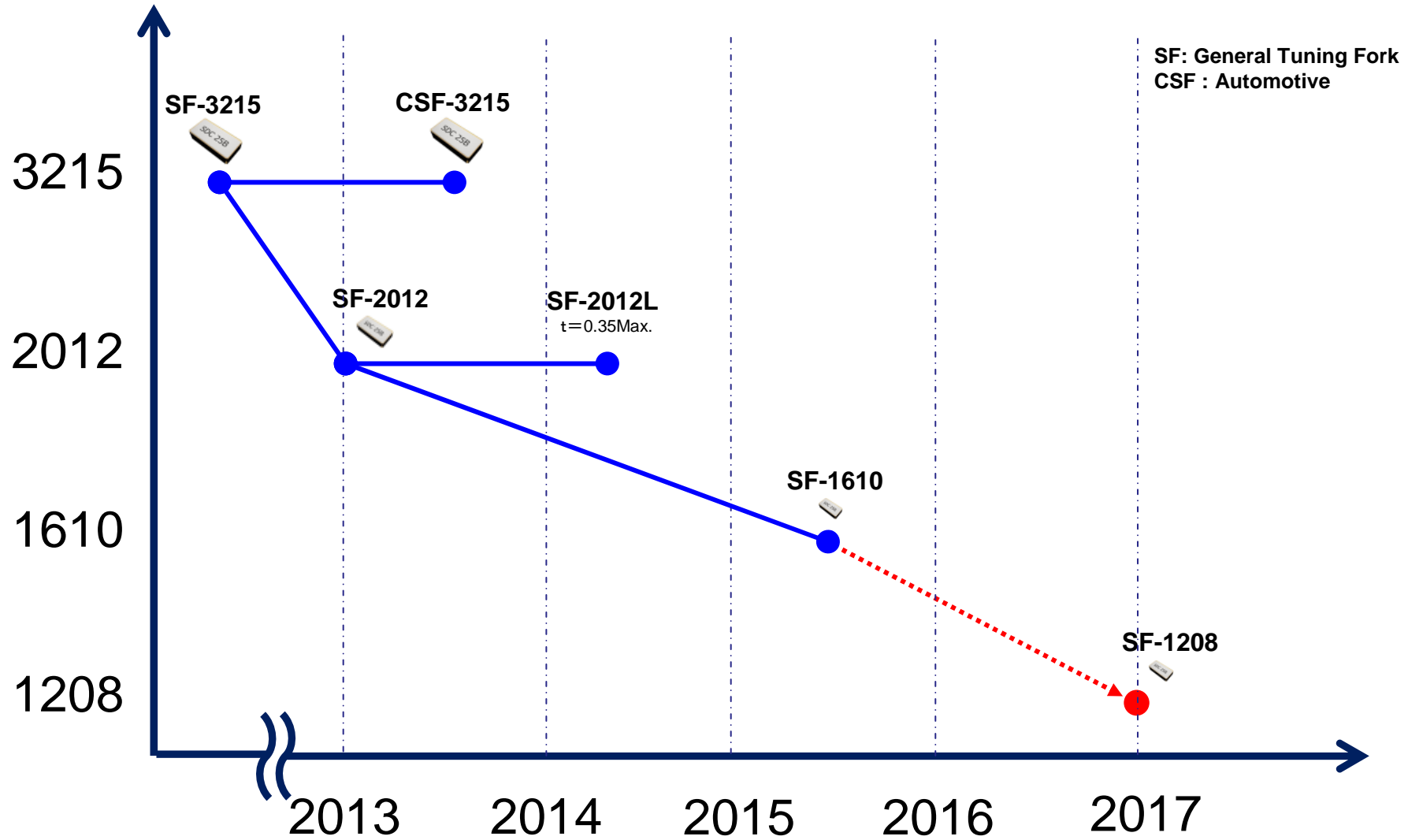
- Will keep continue to develop new small packages size (1210 & 1008)
- Focus on automotive application
- Currently we are in ranking no 7 in the world and we hope to go up to no 5

Roadmap update

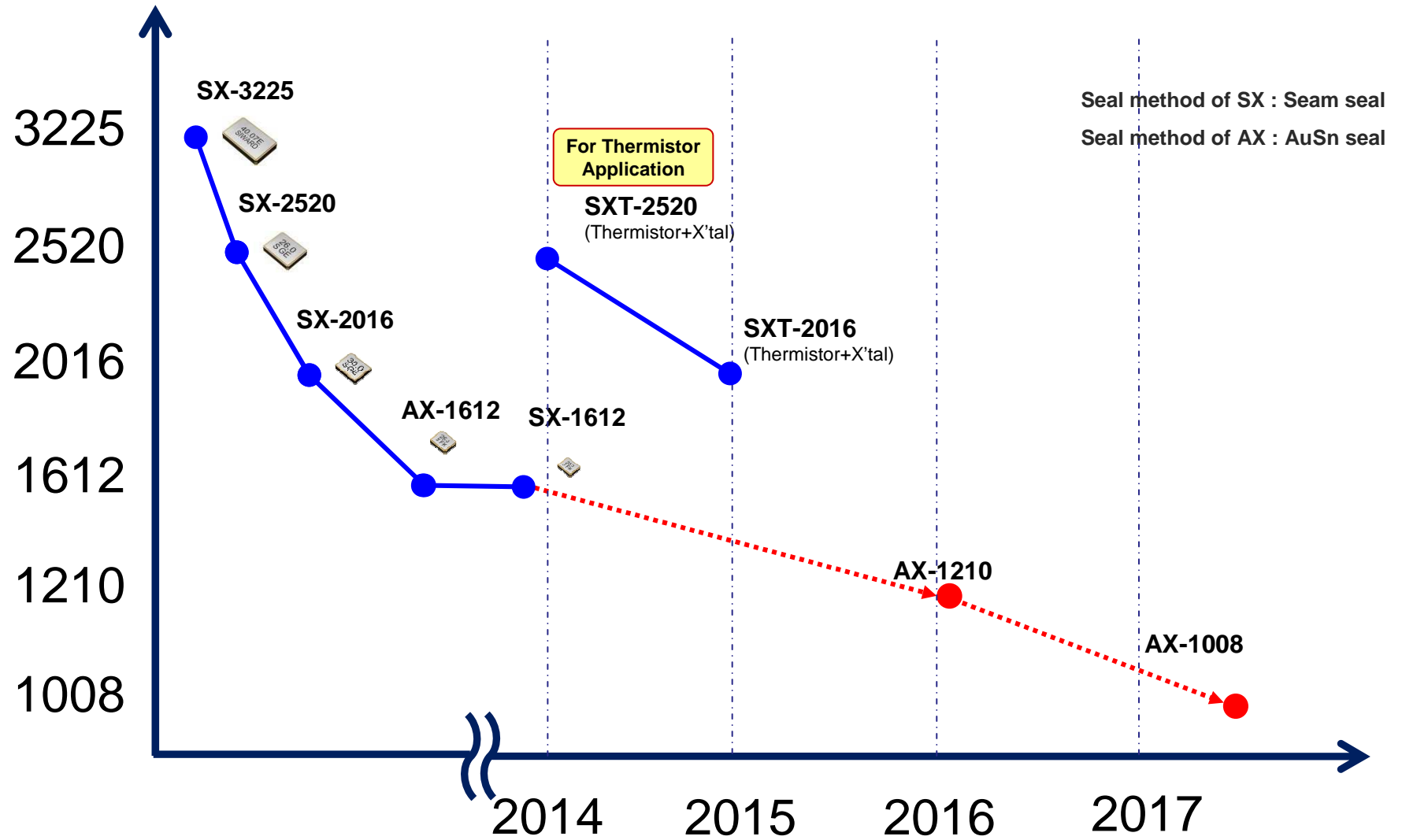


- 1. Tune Fork Series (X'tal & OSC)*
- 2. Crystal Series (SX & AX)*
- 3. OSC/VCXO Series*
- 4. VC-TCXO Series*

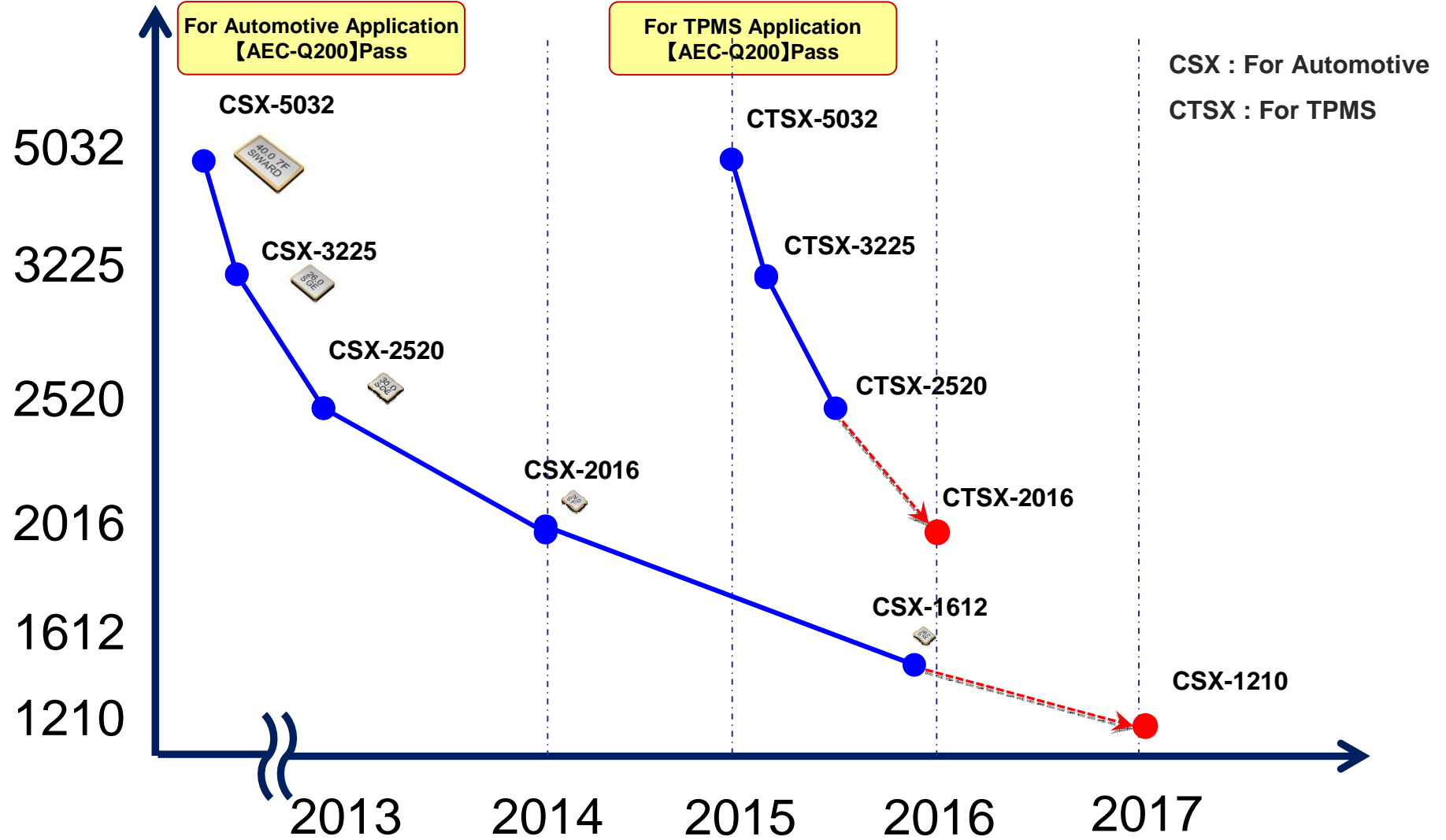
TF series Roadmap



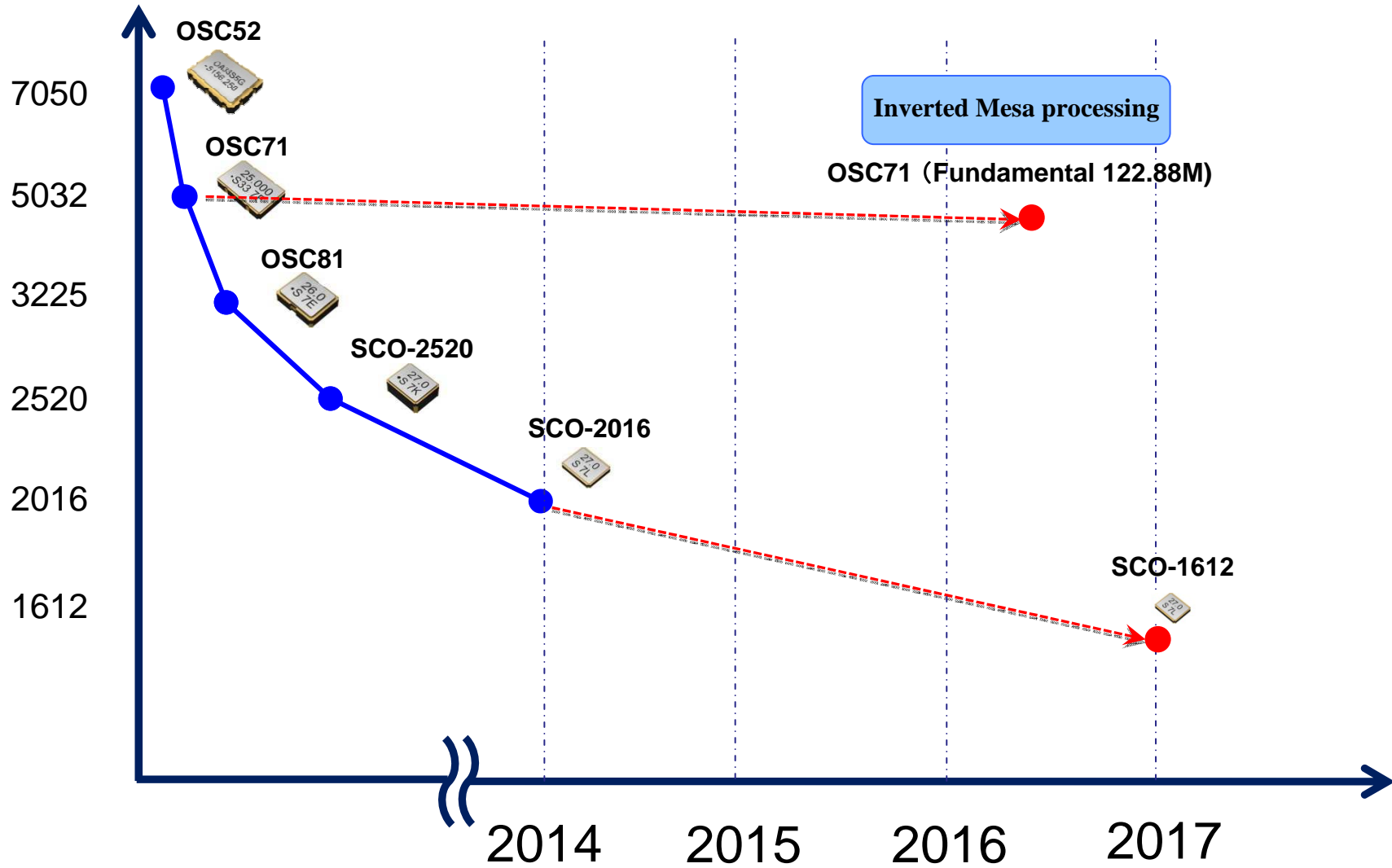
Crystal Series (SX & AX) Roadmap

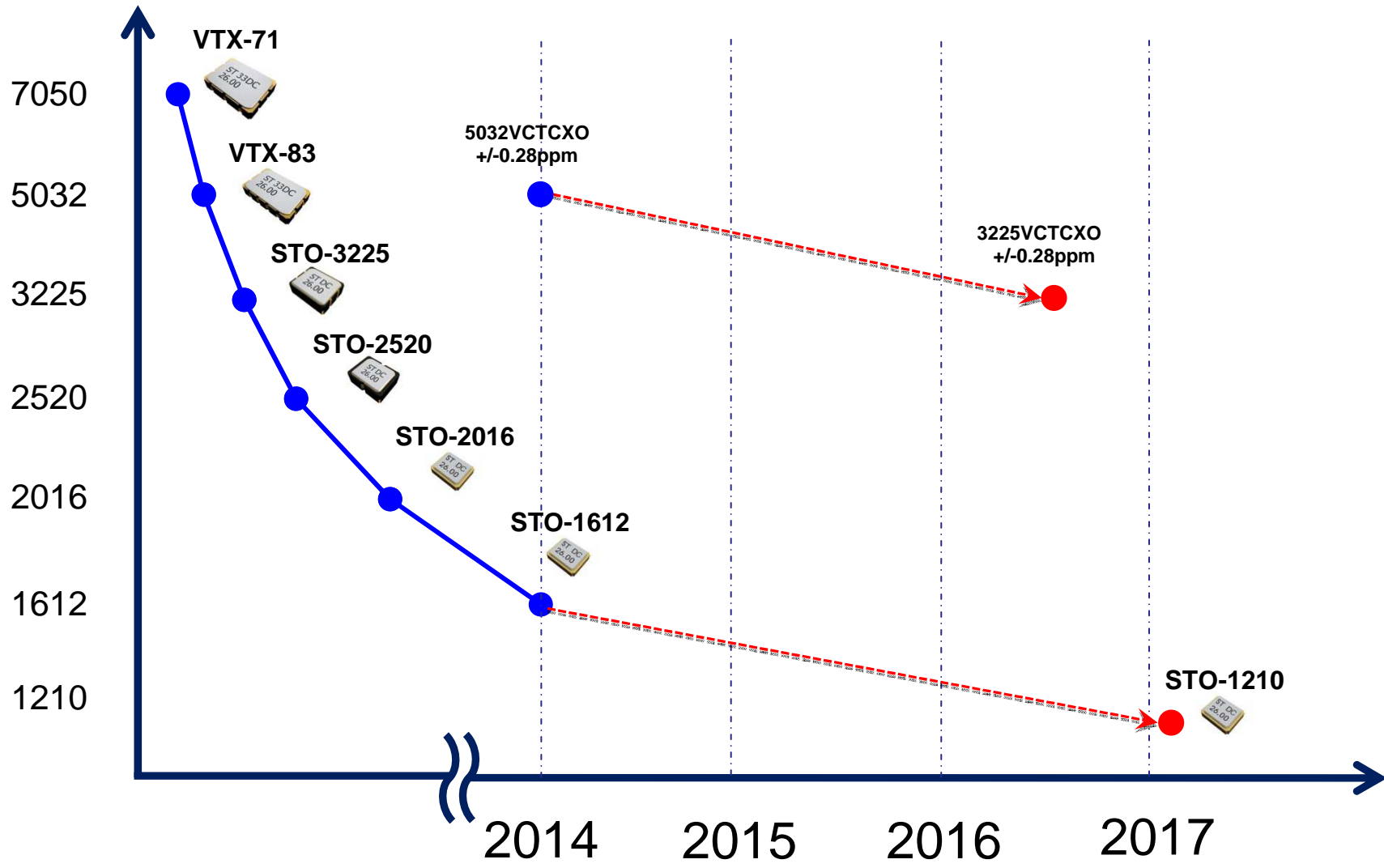
Crystal Series (CSX & CTSX) Roadmap



OSC/VCXO Series Roadmap



TCXO&VCTCXO Roadmap





Thank You