

Global and China Crystal & Oscillator Industry Report, 2009-2013



Crystal oscillator, being one of the most common components in electronic products, has been widely applied for nearly all electronics. The top four crystal oscillator manufacturers are all from Japan, followed by TXC Corp and Vectron. Vectron, one member of DOVER Group, is from the United States. Rakon, a New Zealand's manufacturer, is adept in producing crystal oscillators for high-precision GPS. HELE and Hosonic are Taiwan's manufacturers, yet the technologies of the both are introduced from Japan. Besides, TEW and River are Japan's manufacturers, and Taitien is from Taiwan. Pericom mainly engages in Clock IC, followed by crystal oscillator. MicroCrystal, a Swiss manufacturer, mainly produces cell phone crystal oscillator.



World Top 19 Crystal Oscillator Manufacturers by Revenue, 2009

	Revenue, 2008 (US\$ mln)	Revenue, 2009	Revenue, 2009 (US\$ mln)
Epson Toyocom	675	795 (JPY100 mln)	846
NDK	571	561 (JPY100 mln)	597
KDS	327	328 (JPY100 mln)	349
Kyocera Kinseki	304	298 (JPY100 mln)	317
TXC	222	223 (US\$ mln)	223
Vectron	200	202 (US\$ mln)	202
Rakon	96	120 (US\$ mln)	120
HELE	118	3,688 (NT\$ mln)	112
Hosonic	119	110 (US\$ mln)	110
TEW	75	70 (US\$ mln)	70
River	51	519 (JPY100 mln)	55
Taitien	51	1,774 (NT\$ mln)	54
Pericom	53	53 (US\$ mln)	53
Micro Crystal	56	50 (US\$ mln)	50
Siward	51	1,517 (NT\$ mln)	46
TAI-SAW	45	1,388 (NT\$ mln)	42
Jingyuan Yufeng	38	278 (RMB mln)	40
ECEC	28	218 (RMB mln)	32
Aker	18	17 (US\$ mln)	17

The year of 2008 witnessed the depression of crystal oscillator industry, and the fear for MEMS and silicon crystal oscillators resulted in the intensive price war in quartz crystal oscillator market. Then the position of traditional quartz crystal oscillator industry has been consolidated after the price war, and the high precision of quartz crystal oscillator has bestowed it a strong vitality, while the prospect of MEMS and silicon crystal oscillators is not yet clear.

Since higher entry barrier and being prevalently applied, the crystal oscillator industry had not shown the striking depression in 2009, and some manufacturers even achieved growth.



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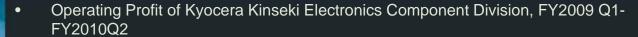
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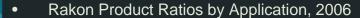
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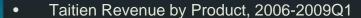
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