

# Global and China Crystal Device Industry Report, 2011-2012

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## Abstracts

The report highlights the followings:

brief introduction to crystal device

analysis on crystal device downstream market

study of crystal device industry

21 leading crystal device vendors around the globe

In general , a smartphone requires 4-8 crystal devices while an ordinary handset needs 2-5 ones, a laptop wants 3-4 crystal devices, a FPTV 4-7 ones, a digital camera 2-4 ones. A limousine demands 70-110 crystal devices while an economical vehicle requires 20-40 crystal devices. In 2011, the shipment of crystal devices worldwide approximated 17 billion units, up roughly 9.7% from 2010.

As the crystal device industry has been exceedingly developed, the crystal device price is declining year by year. By 2011, the average price decreased to JPY20 from JPY34 in 2005. In terms of market scale, the crystal device industry slightly contracted by 0.7% in 2011 compared to 2010. The market in 2012 will be more depressed, down 2.7% as expected. In 2011, the crystal device price fell by roughly 4%, while the price fall in 2012 is expected to be 6-10%.

Many years of market development shows that MEMS and silicon crystal devices can only make some progress in fields requiring low level of performance. Thus it is no way for the two to replace the position of traditional crystal devices.

Nearly all the crystal device manufacturers suffered setback in 2011 and 2012, especially those veteran in X'TAL and CXO. But there was an exception: the players engaged in TCXO with high requirement on precision saw meager growth, such as NDK.

As the first largest crystal device manufacturer in Taiwan, TXC is expected to see more growth potential because of large-scale effect. A majority of Taiwan-based electronics manufacturers employ crystal devices made by TXC which has indirectly become the major provider of Apple, Amazon, Google and Microsoft. Therefore, the shipment of TXC is increasingly growing.

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