

Koyo

Koyo Precision Co.,Ltd.
Apr.2010



Company Profile

Koyo

NAME

KOYO PRECISION CO.,LTD

Head Office

*4715 koasumi Fuji Yoshida-shi
Yamanashi,403-0002 JAPAN*

TEL 81-555-23-8000

FAX 81-555-23-5171

E-mail: info@koyo-seimitu.co.jp

URL http://www.koyo-seimitu.co.jp

Tokyo Office

*5-25-18 Tokyo-to Shinagawa-ku Higashigotanda
KEC building 8F Japan*

President

Eiku Oshiro

Foundation

November 1957

Capital

yen 10 million

Business

Crystal Oscillators

Employees

55 as of Apr. 2010



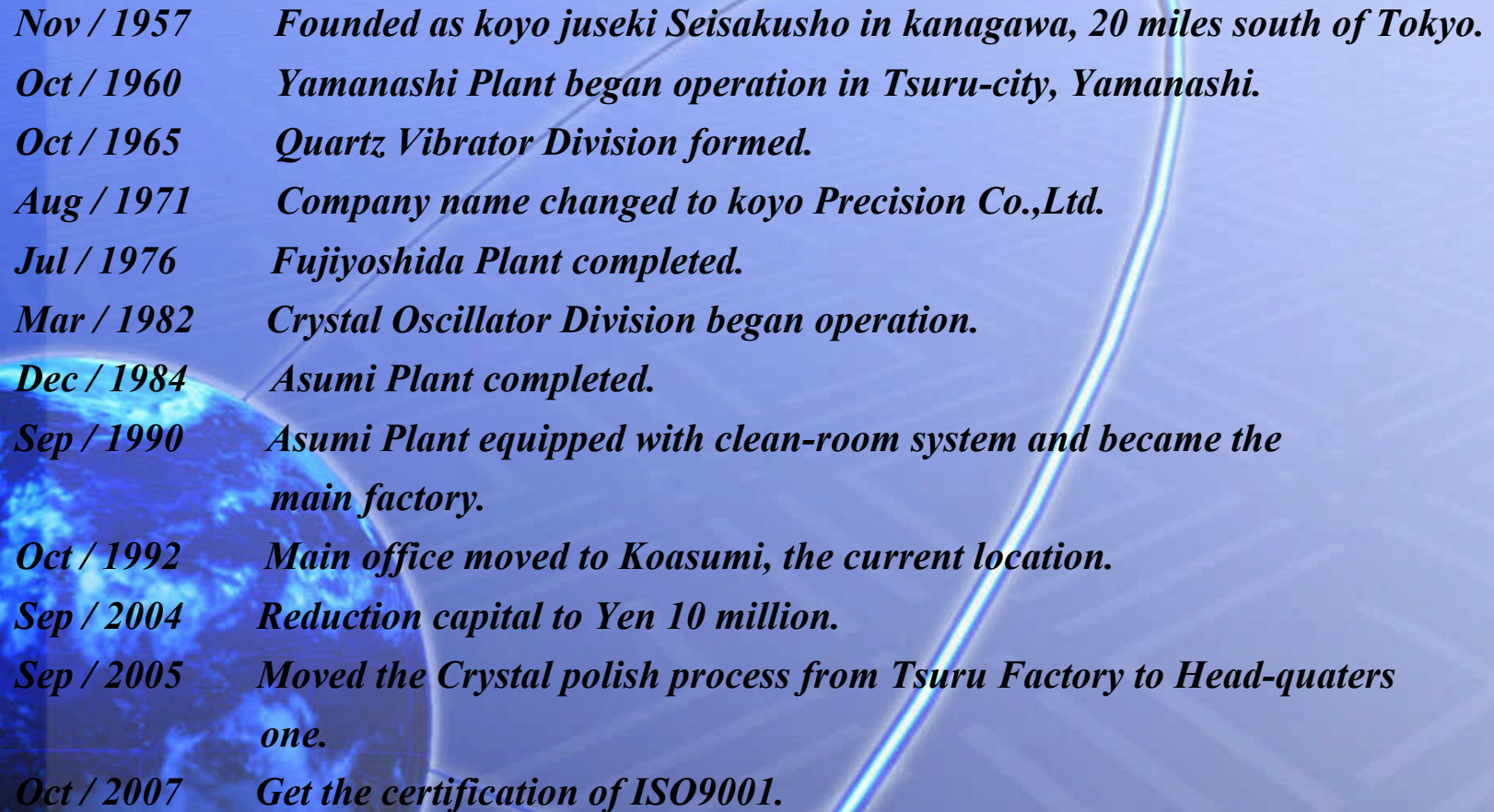
Company Organization

Koyo



Company History

Koyo

- 
- Nov / 1957 Founded as koyo juseki Seisakusho in kanagawa, 20 miles south of Tokyo.*
 - Oct / 1960 Yamanashi Plant began operation in Tsuru-city, Yamanashi.*
 - Oct / 1965 Quartz Vibrator Division formed.*
 - Aug / 1971 Company name changed to koyo Precision Co.,Ltd.*
 - Jul / 1976 Fujiyoshida Plant completed.*
 - Mar / 1982 Crystal Oscillator Division began operation.*
 - Dec / 1984 Asumi Plant completed.*
 - Sep / 1990 Asumi Plant equipped with clean-room system and became the main factory.*
 - Oct / 1992 Main office moved to Koasumi, the current location.*
 - Sep / 2004 Reduction capital to Yen 10 million.*
 - Sep / 2005 Moved the Crystal polish process from Tsuru Factory to Head-quarters one.*
 - Oct / 2007 Get the certification of ISO9001.*

Company Objectives

Koyo

Objectives

- (1) The company makes an utmost effort to fulfill Customers satisfaction and to maintain our spectacular reputation in the market*
- (2) The company serves the society consistently by supplying the highest quality products, and creates a prosperous future for customers, suppliers and employees*



Company Policy

Koyo

Policy

- (1) To develop and produce leading products with a highest quality*
- (2) To listen sincerely to customers and fulfill their needs*
- (3) To create company's bright future for employees and their families*



Major Customers

Koyo

Main trading partners

*VECTRON INTERNATIONAL , SUNNY GROUP , FANUC ,
YOKOGAWA , ONO SOKKI , FURUKAWA ELECTRIC ,
HIRAKAWA HEWTECH CORP , RELIANCE ELECTRIC ,
KAGA ELECTRONICS , SATORI ELECTRIC , HISHIDEN
COMMERCIAL , SUMITRONICS , NAKAMURA DENKI ,
SUN-WA TECHNOS CORP , RYOSAN , FUJITRON ,
MAKI ELECTRO , PIONICS , TOYO KIZAI , ISOTRONICS ,
SEIDEN , etc...*

Suppliers

*SEAGATE , CISCO SYSTEMS , INTEL , HUAWEI , HP ,
NOKIA , ALCATEL-LUCENT , CANON ,
NEC GROUP , TOSHIBA GROUP , PANASONIC ,
MITSUBISHI ELECTRIC , ROM , OKI DENKI ,
HITACHI INTERNATIONAL ELECTRIC , CIS
NAKAYO TELECOMMUNICATIONS , LG , SAMSUNG , etc...*

Main Products

Koyo

SMD Crystal Clock Oscillators-CMOS series

KCO-200series

1MHz ~ 50MHz



KCO-300series

1MHz ~ 60MHz



KCO-500series

1MHz ~ 150MHz



KCO-600series

1MHz ~ 220MHz



LVPECL&LVDS series PLL(Multi)

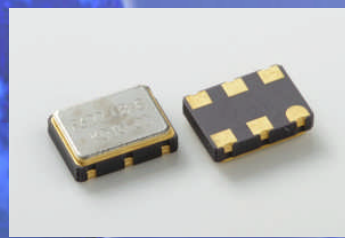
KPO、 KLO-600series

25MHz ~ 250MHz



MPO、 MLO-600series

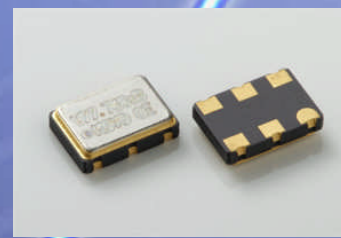
1MHz ~ 800MHz



Voltage Controlled Crystal Oscillators

KCV-600series

10MHz ~ 80MHz



(VCXO)

CAPACITY

1000kpcs / M

Applications

Koyo



KCO-600 Series

100~150MHz
(1.8V~3.3V)
• HDD, PDP
Communication equipment
155.52~212.5MHz
(2.5V~3.3V)
• Optical communication



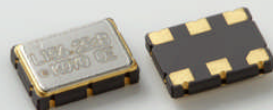
KCO-500 Series

28~150MHz
(1.8V~3.3V)
• Industrial camera
• Communication equipment



KCO-300 Series

14~30MHz
(1.8V~5.0V)
• Portable terminal
• LAN • PND
• Notebook computer



KPO,KLO-600 Series

25~250MHz
(2.5V or 3.3V)
• SONET/SDH
• Fiber Channel
• Ethernet, GbE
• SAN • FPGA
• Digital Video



KPO,KLO-500 Series

25~250MHz
(2.5V or 3.3V)
• SONET/SDH
• Fiber Channel
• Ethernet, GbE
• SAN • FPGA
• Digital Video

14~30MHz
(1.8V~5.0V)
• Portable terminal
• LAN • PND
• Notebook computer



KCO-200 Series

1~800MHz
(3.3V)
• Fiber Channel
• Ethernet, GbE
• SAN • FPGA



MPO,MLO-600 Series (PLL)

LVPECL, LVDS Output

10~80MHz
(2.5V or 3.3V)
• xDSL,
• WDM
• PC card

VCXO



KCV-600 Series

77~170MHz
(3.3V~5.0V)
• SONET/SDH
• Fiber Channel
• LAN/WAN

Developing



KPV-600 Series

* LVPECL Output

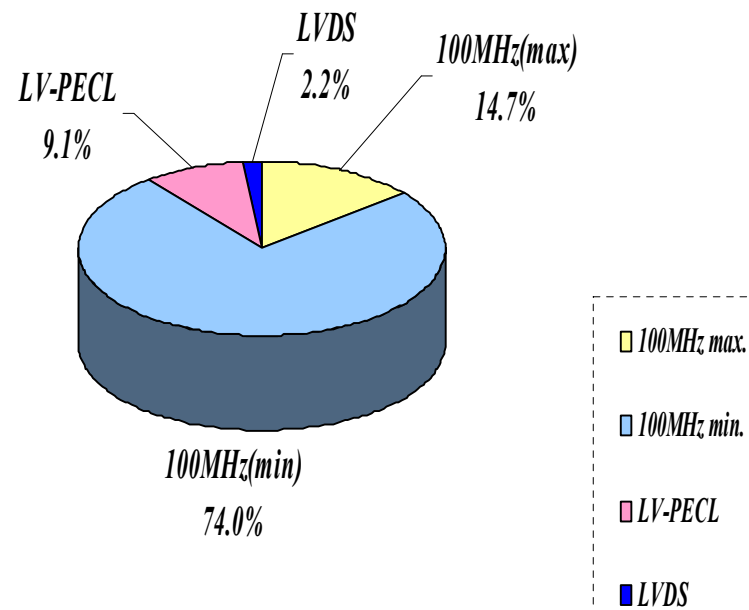
CMOS Output

LVPECL, LVDS Output

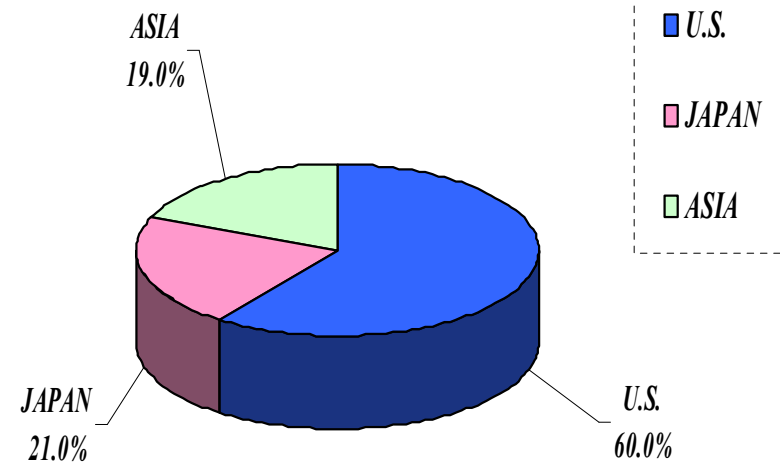
Market Segmentation and production of frequency

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2008.04 ~ 2009.12



2008.04 ~ 2009.12



ROAD MAP

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New

60~130MHz
(1.8~3.3V)



Ultra miniature size, High-Frequency SPXO

Developing

1~700MHz
(1.8~3.3V)
 $\pm 20\text{ppm}$



Low Noise ultra high frequency

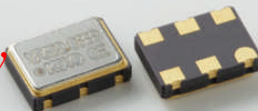
Planning

3.2x2.5 PKG
PECL & LVDS
30MHz~155MHz

Ultra miniature size
PECL/LVDS

New

80~170MHz
(3.3~5.0V)



High-Frequency
vcxo

MPV,MLV-600 Series PLL(Multi)

Developing

30~155MHz
(1.8~3.3V)



HCSL Series

Planning

5.0x3.2 PKG
PLL : PECL & LVDS
1MHz~700MHz

Ultra high-frequency
miniature PECL/LVDS

New

High-temperature, High-stability SPXO

I. 1.2.5~55MHz (3.3V) $\pm 50\text{ppm}/-40\sim+125^\circ\text{C}$

II. $\pm 15\text{ppm}/-10\sim+70^\circ\text{C}$

2010

2011

2012

Developing Product

Koyo

Low Noise ultra high-frequency crystal oscillator

MPO-600, MLO-600series (PLL/Multi)

Frequency Range *1.000MHz ~ 700.000MHz*

Frequency Stability *± 20ppm、*

Voltage controlled high-frequency crystal oscillator

KPV-600 series (PECL Output)

Frequency Range *170.000MHz*

Frequency Stability *± 50ppm, ± 100ppm*

HCSL Output crystal oscillator

KHO-600series (HCSL)

Frequency Range *30.000MHz ~ 155.000MHz*

Frequency Stability *± 25ppm ~ ± 100ppm*

Operating Temp.Range *-40 ~ +85*

Quality Control

Koyo

Policy

*We have produced many Crystal parts for years.
They will give you a satisfaction of your specification
request and will not let you down.
Because we will form following I.S.O system and will
continue the improvement of effect.*



Action

- a) We promote the standard issues for Quality process.*
- b) We have made products faithfully for accommodation to your specification.*

Sensitive Subject

- a) We have made products with regulations against Pb-Free and RoHS rule.*
- b) We have received a prize from Vectron as high-quality company , and they got us only recognition factory in Japan.*



Certificate Awarded

Koyo



CERTIFICATE OF APPROVAL

This is to certify that the Quality Management System of:

KOYO PRECISION CO., LTD.
Fujiyoshida-shi, Yamanashi-ken
Japan

has been approved by Lloyd's Register Quality Assurance to the following Quality Management System Standards:

ISO 9001:2000, JIS Q 9001:2000

The Quality Management System is applicable to:

Design, development and manufacture of crystal oscillators.

Approval
Certificate No: YKA 4003990

Original Approval: 9 October 2007
Current Certificate: 9 October 2007
Certificate Expiry: 8 October 2010


Issued by: Lloyd's Register Quality Assurance Limited

This document is subject to the provision on the reverse
71 Fenchurch Street, London EC3M 4BS United Kingdom. Registration number 1879370.
This approval is carried out in accordance with the LRQA assessment and certification procedures and monitored by LRQA.
The use of the UKAS Accreditation Mark indicates Accreditation in respect of those activities covered by the Accreditation Certificate Number 001

Certificate of Green Activity

株式会社光陽精密

This is to certify that you have satisfied the environmental management activity required by Canon Green Procurement Standards.

Term of Validity : March/2009 - March/2011

Canon Inc., Tokyo, Japan

April 20, 2009


Kiyoto Furuta
Senior General Manager
Environment Planning Center
Environment Headquarters, CANON INC.

No. 5057

Canon