




当代电子元器件领域的先驱

— Interview with Mr. Satoshi Sonoda, Managing Director of Murata Electronics Trading (Shenzhen) Co., Ltd.

— 访村田电子贸易（深圳）有限公司董事总经理 园田聪先生

电子界的改革者

陶器作为人类第一次运用天然物按照自己的意志创造出来的东西，是人类文明的重要成果，是生产力发展的重要里程碑。作为泥与火的结晶，陶器从远古时代到现在不断丰富着人类的生活。时至1944年，在日本京都的一个小作坊里，一场以科学思想为基础的有别于传统陶瓷的“新型陶瓷”技术革命正在进行。这种新型陶瓷具有传统陶瓷所无法比拟的结构，显示出令人称奇的特性。经过烈火烧制，使陶瓷形成晶粒世界，从而获得种种电气特性。村田电子贸易（深圳）有限公司的母公司是村田制造所，它就是在这个小作坊里成功开发出了使用氧化钛陶瓷电容器，开始了电子元器件制造新的征程，进而把这一电子进化论演绎至今。

电子领域的领导者

作为村田电子贸易（深圳）有限公司董事总经理园田聪先生，在谈到电子元器件对于人们生活、工作、娱乐的影响时，他说，早在1947年，村田制作所的创始人村田昭先生与日本京都大学工程系合作研制出第一只以钛酸钡为原料的电容器，从此掀开了人类使用电子机器新的一页。作为全球电子元器件的领航者，村田集团在全球市场占有率非常稳固的领导地位。值得自豪的是，村田集团在陶瓷电容器、电磁干扰、陶瓷滤波器、陶瓷共鸣器、微波设备领域拥有巨大的市场，其中陶瓷滤波器、陶瓷振荡器的全球市场占有率达65 - 70%，多层陶瓷电容器占35 - 40%，EMI 静噪滤波器占35%，表面波滤波器占25 - 30%。

村田产品的广泛应用

谈到村田产品的应用范围，园田聪先生深有感触地说：“只要有电子机器的地方，就有村田的电子元器件和设备。比如我们使用的移动电话、计算机、汽车、数码家电等等电子机器，他们的内部就是由一个个不起眼的各种元器件组成并发挥着关键的作用。



公司产品系列 Company's Products Family

人类的的生活和工作因为电子技术的发展而越来越舒适和便利，所以各种电器的电子元器件也变得越来越重要。随着社会需求的进一步发展，电器将向小型化、多功能、高效率方向发展。比如手机，十年前的手机体积和现在的手机相比就是一个有力的说明，这是因为手机里的电子元器件在逐步小型化。最有说服力的当属计算机，在有史以来的第一台计算机亮相时，它的尺寸大到占据一个楼层，且不说体积巨大，运行速度之慢也是难以忍受的。如今，一个运行速度极快的计算机仅收纳于相当笔记本大小的电脑中，其原因不难理解，村田制作所的电子元器件为计算机实现高速化、大容量、多功能、小型化、低耗电的进化作出了巨大贡献。”值得一提的是，村田技术对计算机的心脏——MPU 的高速化给予了特别关注，2004年MPU 处理速度达到3GHz-4GHz，预计到2010年将达到20GHz。汽车也将被大力改革。CAN - BUS 是村田制作所应对复杂且高速化的汽车电子的车内LAN 标准接口产品之一，是一种为减少因汽车电子化而增加的电线束量、提高数据传输速度、改善故障诊断系统及相互连接动力传动系统和车身系统的控制部件。正是依赖高精度的陶瓷振荡器，即“CERALOK®”计算机适时装置，以极好的温度稳定性和卓越的起动速度支撑着堪称驾驶神经系统，担负着构筑人与车之间全新关系的技术重任。此外，人们日常生活中用数码相机拍照时，即使相机晃动，照出来的相片还是清晰的，其中的诀窍就是利用了陶瓷压电特性的陀螺传感器。

村田集团在中国

综上所述，村田电子的技术和产品已经渗透到我们工作和生活的各个领域。目前，村田电子公司已经在全球建立了

50 多家分公司来实现技术创新与低成本运作共存。在中国村田的工厂主要分布于北京、苏州、无锡和深圳，营业所设在天津、北京、青岛、大连、上海、杭州、苏州、深圳和香港。园田聪先生说，村田集团将通过扩大无锡工厂的生产能力来支持在中国的销售，并且增加当地销售网络，通过加强区域应用工程师和销售代表处，公司在未来将扩大多层陶瓷电容、蓝牙模块、电源供应器和传感器的市场份额。

村田全球化和本土化

自1983年大学毕业后就加入村田公司的园田聪先生深谙管理之道，通过他在日本、新加坡和美国的销售和市场经验而熟悉全球管理。他指出：“作为企业的管理者，必须了解企业的使命及文化，必须有全球化的战略眼光，并且完全尊重当地的文化和员工，与他们共同分享公司未来前景，并且尽可能多的提供发展机会，同时，让当地的员工了解村田的理念和价值观。”公司派中国员工到日本总部去培训，使其成长为村田集团的全球人力资源，并促进海外分支机构人员的循环流动。

村田的未来

谈到未来发展计划，园田聪总经理满怀信心，他说：“随着中国市场的不断扩大，越来越多的客户设计中心将向中国转移。根据需求，通过中国的信息共享，村田将研发出更多的新产品，参与更多的技术解决方案。村田的口号是‘电子界的革新者’。这反映了我们的决心是要成为一个电子领域内的翘楚，通过创造优秀产品，使用新的材料和新的技术。然而遗憾的是我们的产品都是内部的电子元件，产品和技术都无法从外面直接看到。这就是为什么村田的名字不象其它产品那样出名的原因。我们的产品非常先进，但是作为电子工业的领导者，我们还需要在全球客户群体、学生以及其它方面进一步提高村田的知名度。我们希望中国的员工能以自己是村田集团的一员而自豪。”



宽敞、明亮的办公环境 Orderly Office Environment



生产车间一瞥 A Glimpse of Production Department



公司前台 Receptionist



布吉南岭工厂 Bu Ji Nan Ling Factory

Innovator in Electronics

Created according to human's pleasure with natural matter for the first time, ceramics is vital advancement for human civilization and significant milestone in productivity development. As the result of mud and fire, ceramic has enriched human's life from the old ages to now. In 1944, a technological revolution, science-based "new-ceramics" which was different from traditional ceramics was underway in a small workshop in Kyoto, Japan. The new ceramics featured unparalleled structure and unique characteristic. Through high-temperature firing, ceramic change crystal formation and grain boundary and thus acquired a variety of electrical characters. Murata Manufacturing Co., Ltd. who is parent company of Murata Electronics Trading (Shenzhen) Co., Ltd., developed the ceramic capacitors with titanium oxide successfully in the small workshop and opened a new era for manufacturing electronic components. They continue the electronic evolutionism up to this minute.

material opened a new era for human using electronic machines. This capacitor was jointly developed by Mr. Akira Murata, the founder of the company, and the Engineering Department in Kyoto University. As the leader of worldwide electronic components, Murata Group has steady status in the global market. It is proud that Murata Group has huge global market in the fields of ceramic capacitors, electromagnetic interference, ceramic filter, ceramic resonator and microwave devices. Among them, the ceramic filters and ceramic resonators occupy 65 per cent to 70 per cent, multi-layer ceramic capacitors 35 per cent to 40 per cent, EMI suppression filters 35 per cent and SAW filters 25 per cent to 30 per cent.



Murata Products Around Us

Talking about the application range of Murata electronic products, Satoshi Sonoda says: "as long as electronic equipments exist, there will be electronic components and devices of Murata. Such as mobile phone, computer, automobile and digital household electrical appliance, their interiors consist of

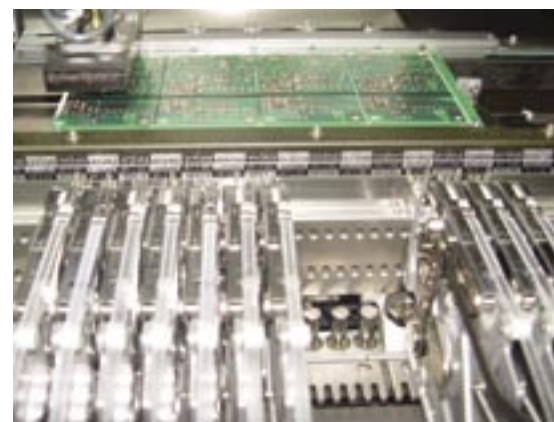
many functional small components and devices. Due to the evolution of electronic technology, human's life and work become more and more comfortable, and all kinds of electronic components become more and more important. With social requirement, electric appliances will develop towards miniaturization, multifunction and high efficiency. Taking mobile phone for example, compared with a decade ago, the current mobile phones size is dramatically small, since the electronic components of mobile phones are becoming miniaturization. The most obvious example is computer. The first computer cannot be bearable because of its slow calculation speed, let alone its floor-size volume. Now it is easy to understand that a high-speed computer is just as large as a notebook. The electronic components produced by Murata contribute the evolution of high speed, big capacity, multifunction, miniaturization and low power consumption. Murata technology pays special attention to the high speed of computer's heart - MPU. In 2004 the processing speed of MPU reached 3GHz—4GHz, and it is expected to reach 20GHz by 2010. Automobiles also have been revolutionized. CAN—BUS is one of specifications of LAN standard interface supported by Murata products to response complex and high-speed automobile electronics. It is also a control unit of fault diagnosis system, interconnection power driven system and car body system to reduce the increased

Murata Leads Electronics Society

Referring to the impact of electronic components to life, work and recreation, Satoshi Sonoda, managing director of Murata Electronics Trading (Shenzhen) Co., Ltd., says that since 1947, the first capacitor with barium titanate as raw



理想的团队 Ideal Team



精密的生产工艺 Accurate Manufacturing Technique

wire volume caused by car electronics, improve the data transmission speed. With its wonderful temperature stability and perfect starting speed, the high-precision ceramics resonator, namely CERALOK®, timing clock device for computers, undertakes the important technical task for drive nerve systems. In addition, while people taking photographs with digital camera in daily life, even if the camera shakes, the photographs are still vivid, because the camera uses the gyro sensor with ceramics piezoelectric property.

Murata Group in China

From the above, we can see that the technology and products of Murata have entered into various fields in our work and life. At present, Murata has established over 50 subsidiaries in the world to realize coexistence of technological innovation and low cost operation. In China Murata has factory in Beijing, Suzhou, Wuxi and Shenzhen, and sales office in Tianjin, Beijing, Qingdao, Dalian, Shanghai, Hangzhou, Suzhou, Shenzhen and Hongkong. Satoshi Sonoda says that the Murata Group will bolster sales in China by expanding production capacity in Wuxi plant as well as increasing its local sales network through enhancing field application engineers and sales representatives. The company expects to enlarge the market shares of multi-layer ceramics capacitors, Bluetooth® module, power supply and sensors.

Murata Globalization and Localization

Satoshi Sonoda, joined in Murata Manufacturing Co., Ltd after graduation from university in 1983, knows well

in global management through his experience of sales & marketing in Japan, Singapore, and the US. He says: "It is necessary for top management to specify company mission, culture and strategic insight of globalization to local employees with fully respect local culture and staff. Moreover it is important to share company's future vision with them and to provide local employees with opportunities as



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many as possible for recognizing the philosophy and value of Murata. On the way of globalization, the company send Chinese employees to headquarters in Japan for training, and will facilitate rotation among overseas affiliates to grow global human resources in Murata Group..

Future Murata

For the trend in future, Satoshi Sonoda says confidently: "as Chinese market becomes bigger and bigger, more and more our customers' design center will transfer to China. According to the trend, Murata will develop more new products and participate in more technical solutions through aggressive information-sharing in China. Murata's slogan is an "innovator in electronics", and this reflects our determination to be an initiator in the electronics sector by creating outstanding products using new material and new technology. However unfortunately, our products and technologies that are inside electronic appliances, can not be seen from outside. This is one of the reasons why

Murata name has not been as famous as other manufactures despite its advanced features.

As the leader of electronics industries, we will enhance Murata brand more aggressively among consumers, students, and any other stakeholders globally. And we hope all of our Chinese employees are proud of being a member of Murata Group.



丰富多彩的文化娱乐活动 Entertainment Activities