



成为国际一流时钟频率器件服务商

BUILDING WORLD-CLASS TIMING SOLUTIONS

产品手册

WWW.YXC.HK

30+ 年时钟频率器件行业经验

100+ 国家及地区服务用户

10万+ m²创新产品研发基地

About YXC

关于YXC



深圳扬兴科技有限公司(下面简称: YXC), 自2010年成立以来, 一直专注于时钟频率器件的研发、生产和销售, 是业界领先的半导体高新技术企业。

公司主营产品包括晶振、可编程振荡器、(VC) TCXO、三级钟、锁相环芯片以及实时时钟芯片等。研发产品通过了AEC-Q200、IATF16949车用体系认证及ISO14001环境管理体系、ISO9001质量管理体系等体系认证, 全频率产品生态链广泛应用于车载、通信、工业、医疗和军工等领域。

近年来, 公司不断加大对时钟芯片、MEMS及高稳晶振的研发投入, 汇聚了一批来自海内外的行业高端人才, 先后成立了台湾半导体研发中心和华南频率器件生产中心, 成为国内首家可编程晶振厂商, 并获得国家级专精特新小巨人、绿色工厂等荣誉称号。

YXC秉承着“赋予科技生命力, 携手伙伴共富足”的使命, 以“成为国际一流的时钟频率器件服务商”为愿景, 坚持技术创新和价值创造, 为成就全球客户的卓越贡献自己的力量。

我们的优势

OUR ADVANTAGES

技术领先

- 国内领先可编程晶振厂家
- 自研时钟芯片
- 丰富的高端产品定制开发经验

质量保障

- 自建独立可靠性实验室
- 生产制程可做到100%溯源
- 通过IATF16949认证、质量示范企业

专业服务

- 快速响应&送样&交付
- 20余年专业售前&售后服务团队
- 产品系列齐全, 一站式采购

优质供应

- 设计研发、生产销售全链路打通
- 与核心主材供应商签订战略合作
- 全流程数字化系统管理

YXC Programmable OSC

YXC石英可编程晶振



石英可编程生产流程图
PROGRAMMABLE OSC PRODUCTION PROCESS

传统振荡器生产流程图

TRADITIONAL OSC PRODUCTION PROCESS



高频范围·任意定制

➤ 1MHz~2100MHz范围内(精确至小数点后六位), 任意频点选择定制

快速交付·灵活供应

➤ 样品2秒出样, 可灵活调整设计
➤ 批量最快一周可交付, 备货更灵活

卓越性能·极致可选

➤ 超高精度±2.5PPM (min.)
➤ 超低抖动150fs (min.)
➤ 超宽温区-40~ + 125°C (max.)

品类齐全·一站选购

➤ 涵盖SPXO/VCXO/VC-TCXO/TCXO
➤ 覆盖2016~7050封装
➤ 提供CMOS/LVDS/LVPECL/HCSL/CML输出方式

32.768kHz Tuning Fork Quartz Crystals

Series	Package Size [mm]	Frequency	Load Capacitance	Features
YT-26		2.0*6.0	32.768 kHz	12.5 pF 高性价比 Cost-effective solution
YT-38		3.0*8.0	32.768 kHz	12.5 pF 高性价比 Cost-effective solution
推荐! RECOMMENDED	YSX1610SK		1.6*1.0*0.5	32.768 kHz 7, 9, 12.5 pF, or specify 贴片式金属封装 Seam sealed metal SMD package
推荐! RECOMMENDED	YSX2012SK		2.0*1.2*0.6	32.768 kHz 7, 9, 12.5 pF, or specify 贴片式金属封装 Seam sealed metal SMD package
热销! SELLING WELL	YST310S		3.2*1.5*0.8	32.768 kHz 7, 9, 12.5 pF, or specify 贴片式金属封装 Seam sealed metal SMD package
	YSX146GA		7.0*1.5*1.4	32.768 kHz 7, 9, 12.5 pF, or specify /
	YSX306GA		8.0*3.8*2.5	32.768 kHz 7, 9, 12.5 pF, or specify /

MHZ Quartz Crystals

Series	Package Size [mm]	Frequency Range	Load Capacitance	Features
HC-49US		11.5*4.5*3.68	3.2768 ~ 32 MHz	7 to 22 pF or specify /
HC-49SMD		11.4*4.8*3.8	3.2768 ~ 32 MHz	7 to 22 pF or specify /
HC-49XSMD		6.1*4.0*2.0	8 ~ 50 MHz	7 to 22 pF or specify /
YSX1210SL		1.2*1.0*0.4	32 ~ 60 MHz	6 to 22 pF or specify 超小超薄 Ultra miniature
YSX1612SL		1.6*1.2*0.4	24 ~ 60 MHz	6 to 22 pF or specify 超小超薄 Ultra miniature
热销! SELLING WELL	YSX2115L		16 ~ 54, or 96 MHz	6 to 22 pF or specify 超小超薄 Ultra miniature
	YSX2215L		12 ~ 54 MHz	7 to 22 pF or specify 贴片式金属封装 Seam sealed metal SMD package
热销! SELLING WELL	YSX3215L		8 ~ 64 MHz	7 to 22 pF or specify 贴片式金属封装 Seam sealed metal SMD package
	YSX5315L		8 ~ 54 MHz	7 to 22 pF or specify 贴片式金属封装 Seam sealed metal SMD package
	YSX530GA		8 ~ 54 MHz	7 to 22 pF or specify 贴片式陶瓷封装 Seam sealed ceramic SMD package
	YSX211TS		19.2, 38.4, 76.8 MHz, or specify	7 to 22 pF or specify 出色的频率稳定性 Excellent frequency stability over temperature
	YSX221TS		19.2, 38.4, 76.8 MHz, or specify	7 to 22 pF or specify 出色的频率稳定性 Excellent frequency stability over temperature

SPXO(CMOS Output)

Series	Package Size [mm]	Frequency Range	Supply Voltage	Features	
热销! Y50110TR		1.6*1.2*0.8 2.0*1.6*0.8 2.5*2.0*0.8 3.2*2.5*1.0 5.0*3.2*1.2 7.0*5.0*1.4	1 ~ 125 MHz, or specify	1.8 to 3.3V CMOS	高可靠性 High reliability OSC
YSO120TK		1.6*1.2*0.8 2.0*1.6*0.8 2.5*2.0*0.8 3.2*2.5*1.0 5.0*3.2*1.2 7.0*5.0*1.4	32.768 kHz	1.8 to 3.3V CMOS	32.768kHz OSC.
YSO130HR		3.2*2.5*1.0 5.0*3.2*1.2 7.0*5.0*1.4	1 ~ 100 MHz, or specify	5V CMOS	高可靠性 High reliability OSC
YSO131LR		1.6*1.2*0.8 2.0*1.6*0.8 2.5*2.0*0.8 3.2*2.5*1.0 5.0*3.2*1.2 7.0*5.0*1.4	20 ~ 50 MHz, or specify	1.2V CMOS	低电压1.2V 1.2V Low Voltage Osc.
推荐! YSO150HT		1.6*1.2*0.8 2.0*1.6*0.8 2.5*2.0*0.8 3.2*2.5*1.0	1 ~ 125 MHz, or specify	1.8 to 3.3V CMOS	宽温、耐高温: -40 to +125°C Wide temerature range: up to -40 to +125°C

SPXO(Differential Output)

Series	Package Size [mm]	Frequency Range	Supply Voltage	Features	
热销! YSO230LR		2.5*2.0*1.1 3.2*2.5*1.2 5.0*3.2*1.3 7.0*5.0*1.6	13.5 ~ 200 MHz	1.8V / 2.5 to 3.3V LVDS / LVPECL / HCSL	低抖动: 0.1ps (Typ.) Low jitter: 0.1ps (Typ.)
推荐! YSO231LJ		2.5*2.0*1.0 3.2*2.5*1.0 5.0*3.2*1.2 7.0*5.0*1.7	100 ~ 250 MHz	1.8 / 2.5 / 3.3V LVDS / LVPECL / HCSL	超低抖动r: 0.05ps (Typ.) Ultra low jitter: 0.05ps (Typ.)

TCXO/ VCTCXO

Series	Package Size [mm]	Frequency Range	Supply Voltage	Features	
推荐! YSO510TP		2.0*1.6*0.7 2.5*2.0*0.8 3.2*2.5*1.2 5.0*3.2*1.3 7.0*5.0*2.3	10 ~ 52 MHz	1.8 / 2.5 / 3 / 3.3V CMOS / Clipped Sine Wave	高精度、高稳定性: ±2.5 ppm (Typ.), ±0.28 ppm (available) Superior frequency stability: ±2.5ppm (Typ.), ±0.28 ppm (available)
YSV350TP		3.2*2.5*1.0 5.0*3.2*1.2 7.0*5.0*2.3	6.4 ~ 60MHz, or specify	1.8 / 2.5 / 3 / 3.3V CMOS / Clipped Sine Wave	低功耗: 6mA 高稳定性± 0.5 ppm (available) Superior frequency stability: ± 0.5 ppm (available)
YSO512ET		5.0*3.2*1.6 7.0*5.0*1.9	10, 12, 12.8, 19.2, 20, 24.576, 25, 30, 32, 40, 48, 50MHz, or specify	1.8 / 2.5 / 3 / 3.3V CMOS / Clipped Sine Wave	超高精度、高稳定性: ±0.1 ppm (available) Ultra high precision: ±0.1 ppm (available)

Programmable SPXO(CMOS Output)

Series	Package Size [mm]	Frequency Range	Supply Voltage	Features	
YSO690PR		2.0*1.6*0.8 2.5*2.0*0.8 3.2*2.5*0.9 5.0*3.2*1.2 7.0*5.0*1.4	1 ~ 200 MHZ	1.8 / 2.5 / 3.3V CMOS	宽频率范围、快速交付 Wide frequency range available Fast delivery
YSO691ER		5.0*3.2*1.8 7.0*5.0*1.8	1 ~ 200 MHZ	1.8 / 2.5 / 3.3V CMOS	高性价比/高抗震性 Low cost solutions/Shock resistant
YSO692PR		3.2*2.5*1.0 5.0*3.2*1.4 7.0*5.0*1.8	150~250MHz	1.8 / 2.5 / 3.3V CMOS	超低抖动: 0.159 ps typ. @ 156.250 MHz Ultra low jitter: 0.159 ps typ. @ 156.250 MHz

Programmable SPXO(Differential Output)

Series	Package Size [mm]	Frequency Range	Supply Voltage	Features	
YSO210PR		3.2*2.5*1.2 5.0*3.2*1.3 7.0*5.0*1.6	10~1500MHz	2.5 / 3.3V LVDS / LVPECL	宽频率范围、快速交付 Wide frequency range available Fast delivery
YSO211PJ		3.2*2.5*1.0 5.0*3.2*1.4 7.0*5.0*1.8	150~2100MHz	1.8 / 2.5 / 3.3V LVDS / PECL / HCSL / CML	宽频率范围 超低抖动: 0.159 ps typ. @ 156.250 MHz Wide frequency range available Ultra low jitter: 0.159 ps typ. @ 156.250 MHz

Programmable TCXO

Series	Package Size [mm]	Frequency Range	Supply Voltage	Features	
YSO511PJ		3.2*2.5*1.6 7.0*5.0*2.5	10~250MHz	2.5 / 3.3V CMOS	宽频率范围、快速交付 高稳定性: ±2.5 ppm (max.) Wide frequency range available/Fast delivery Superior frequency stability: ±2.5 ppm (max.)
YSO250PT		3.2*2.5*1.6 7.0*5.0*2.5	10~1500MHz	2.5 / 3.3V LVDS / LVPECL	宽频率范围、快速交付 高稳定性: ±2.5 ppm (max.) Wide frequency range available/Fast delivery Superior frequency stability: ±2.5 ppm (max.)

Programmable VCXO(CMOS Output)

Series	Package Size [mm]	Frequency Range	Supply Voltage	Features	
YSV310PR		3.2*2.5*1.2 5.0*3.2*1.3 7.0*5.0*1.6	10~250MHz	2.5 / 3.3V CMOS	宽牵引范围: ±50ppm (min) 超低抖动: 1.0 ps typ. Wide pull range: ±50ppm (min) Low jitter: 1.0 ps typ.
YSV311PJ		5.0*3.2*1.4 7.0*5.0*1.8	15~250MHz	1.8 / 2.5 / 3 / 3.3V CMOS	宽牵引范围: ±200ppm 超低抖动: 0.159 ps typ. @156.25 MHz Wide pull range: ±200ppm Ultra low jitter: 0.159 ps typ. @156.25 MHz

Programmable VCXO(Differential Output)

Series	Package Size [mm]	Frequency Range	Supply Voltage	Features
YSV220PR		3.2*2.5*1.2 5.0*3.2*1.3 7.0*5.0*1.6	10~1500MHz LVDS/ LVPECL	宽频率范围、快速交付 Wide frequency range available Fast delivery
YSV221PJ		5.0*3.2*1.4 7.0*5.0*1.8	15~2100MHz LVDS/ PECL/ HCSL/ CML	宽牵引范围:± 200ppm 超低抖动:0.163 ps typ. @ 2000 MHz Wide pull range: ± 200 ppm Ultra low jitter: 0.163 ps typ. @ 2000 MHz

Programmable VCTCXO

Series	Package Size [mm]	Frequency Range	Supply Voltage	Features
YSV531PT		3.2*2.5*1.6 7.0*5.0*2.5	10~250MHz CMOS	宽频率范围、快速交付 高稳定性: ± 2.5 ppm (max.) Wide frequency range available/Fast delivery Superior frequency stability: ± 2.5 ppm (max.)
YSV322PT		3.2*2.5*1.6 7.0*5.0*2.5	10~1500MHz LVDS/ PECL	宽频率范围、快速交付 高稳定性: ± 2.5 ppm (max.) Wide frequency range available/Fast delivery Superior frequency stability: ± 2.5 ppm (max.)

Programmable SSXO (EMI reduction)

Series	Package Size [mm]	Frequency Range	Supply Voltage	Features
YSO171PS		2.5*2.0*0.7 3.2*2.5*1.0 5.0*3.2*1.2 7.0*5.0*1.4	1~200 MHz CMOS	展频方式多样: 中心展频或向下展频 多种展频调制宽度: ± 0.125%~± 2% Spread types: center spread or down spread Spread percentage: ± 0.125%~± 2%

Automotive Grade Quartz Crystals

Series	Package Size [mm]	Frequency Range	Load Capacitance	Features
YSX1612SC		1.6*1.2*0.4	24 ~ 60MHz	6 to 22 pF or specify
YSX211SC		2.0*1.6*0.5	16 ~ 72MHz	6 to 22 pF or specify
YSX221SC		2.5*2.0*0.6	12 ~ 80MHz	6 to 22 pF or specify
YSX321SC		3.2*2.5*0.7	8 ~ 66MHz	6 to 22 pF or specify
YSX530SC		5.0*3.2*1.1	7.6 ~ 54MHz	6 to 22 pF or specify
YSX531SC		5.0*3.2*0.9	7.6 ~ 54MHz	6 to 22 pF or specify
YSX532GC		5.0*3.2*1.1	12 ~ 48MHz	6 to 22 pF or specify

Automotive Grade Quartz Oscillators

Series	Package Size [mm]	Frequency Range	Supply Voltage	Features
YSO140TC		1.6*1.2*0.8 2.0*1.6*0.8 2.5*2.0*0.8 3.2*2.5*1.0 5.0*3.2*1.2 7.0*5.0*1.4	1 ~ 54MHz, or specify	1.8 to 3.3V CMOS



Cooperative partner

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华大半导体
HUA DA SEMICONDUCTOR

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ABB

BOSCH

Schneider
Electric
施耐德电气

Honeywell

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扬兴（深圳）总部

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