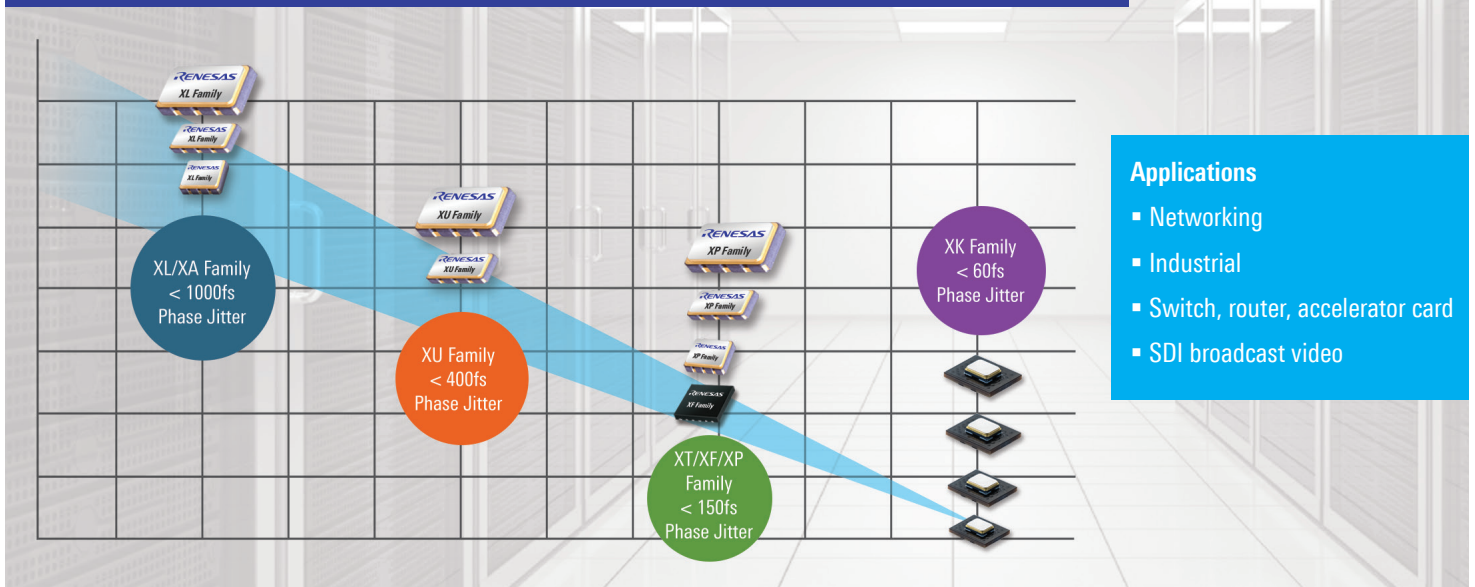


PROXO2 HIGH-PERFORMANCE CLOCK OSCILLATOR FAMILY



Renesas' family of clock oscillators offers designers a reliable on-time solution. Short lead-time, low noise, wide frequency range, excellent temperature versus frequency performance, and very little engineering effort for design in, makes them an excellent choice over conventional technology solutions. The clock oscillator families have stabilities as tight as $\pm 3\text{ppm}$, a range of phase jitter options, and temperature capabilities up to $+105^\circ\text{C}$. These devices also offer extremely quick delivery for both standard and custom frequencies (16kHz to 2.1GHz).

Renesas advantages

- Configurable output type
 - LVCMOS (HCMOS), LVPECL, LVDS, HCSL, and CML
- Phase jitter options
 - 55fs, 150fs, 400fs, and 1000fs
- 1.8, 2.5, and 3.3VDC voltage options
- Frequency stability options from $\pm 3\text{ppm}$ to $\pm 100\text{ppm}$

Configurable PLL Oscillator Family

Model	ProXO XK	ProXO XT, XF & XP	XU	XL & XA
Package Options	1.8 x 1.4 mm 2.0 x 1.6 mm 2.5 x 2.0 mm 3.2 x 2.5 mm	2.5 x 2.0 mm 3.2 x 2.5 mm 5.0 x 3.2 mm 7.0 x 5.0 mm	5.0 x 3.2 mm 7.0 x 5.0 mm	3.2 x 2.5 mm 5.0 x 3.2 mm 7.0 x 5.0 mm
Voltage Options	1.8V, 2.5V, 3.3V	1.8V, 2.5V, 3.3V	1.8V, 2.5V, 3.3V	2.5V, 3.3V
Phase Jitter (12 kHz to 20 MHz)	< 60fs	< 150fs	< 400fs	< 1000fs
Outputs	LVDS, LVPECL, LVCMOS, HCSL, CML	LVDS, LVPECL, HCSL, CML	LVDS, LVPECL, HCSL, LVCMOS	LVDS, LVPECL, LVCMOS
Frequency Range	Configurable up-to 3 networking frequencies	15 to 2100 MHz	0.016 to 1500 MHz	0.75 to 1350 MHz
VCXO option	–	Yes (analog and I2C)	–	Yes (analog) $\pm 50\text{ppm}$ APR

HIGH-PERFORMANCE CLOCK OSCILLATOR FAMILY

Need to request a sample or determine an orderable part number?

Please use Renesas' on-line tool for clock oscillators

renesas.com/customxo

Submit by Part Number

OR: General Configuration & New Frequency Request

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Jitter (typical) 

- ☐ < 750fs to 890fs (AEC-Q200)
- ☐ < 750fs to 890fs
- ☐ < 300fs
- ☐ < 150fs
- ☒ < 60fs

Package 

- ☐ 7 x 5 mm
- ☐ 5 x 3.2 mm
- ☐ 3.2 x 2.5 mm
- ☒ 2.5 x 2 mm
- ☐ 2.0 x 1.6 mm
- ☐ 1.8 x 1.4 mm

OE Position 

- ☐ Pin 1 - Active High
- ☐ Pin 2 - Active Low
- ☒ Pin 2 - Active High
- ☐ Pin 2 - Active Low
- ☐ Pin 5 - Active High

Voltage 

- ☐ 3.3 V
- ☒ 2.5 V
- ☐ 1.8 V

Fsel Frequency (MHz) Output Type

Configuration 1	Low	100	LVDS
Configuration 2	Float	100	LVDS
Configuration 3	High	100	LVDS

Clear frequency and output selection

Stability 

- ☐ ± 100 ppm
- ☒ ± 50 ppm
- ☐ ± 50 ppm APR (VCXO)
- ☐ ± 30 ppm
- ☐ ± 25 ppm
- ☐ ± 20 ppm
- ☐ ± 3 ppm (TCXO)

Temperature 

- ☐ -20°C to +70°C
- ☒ -40°C to 85°C
- ☐ -40°C to +105°C

Preview Configuration

Reset Configuration

To request samples, download documentation or learn more, visit: renesas.com/xo



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