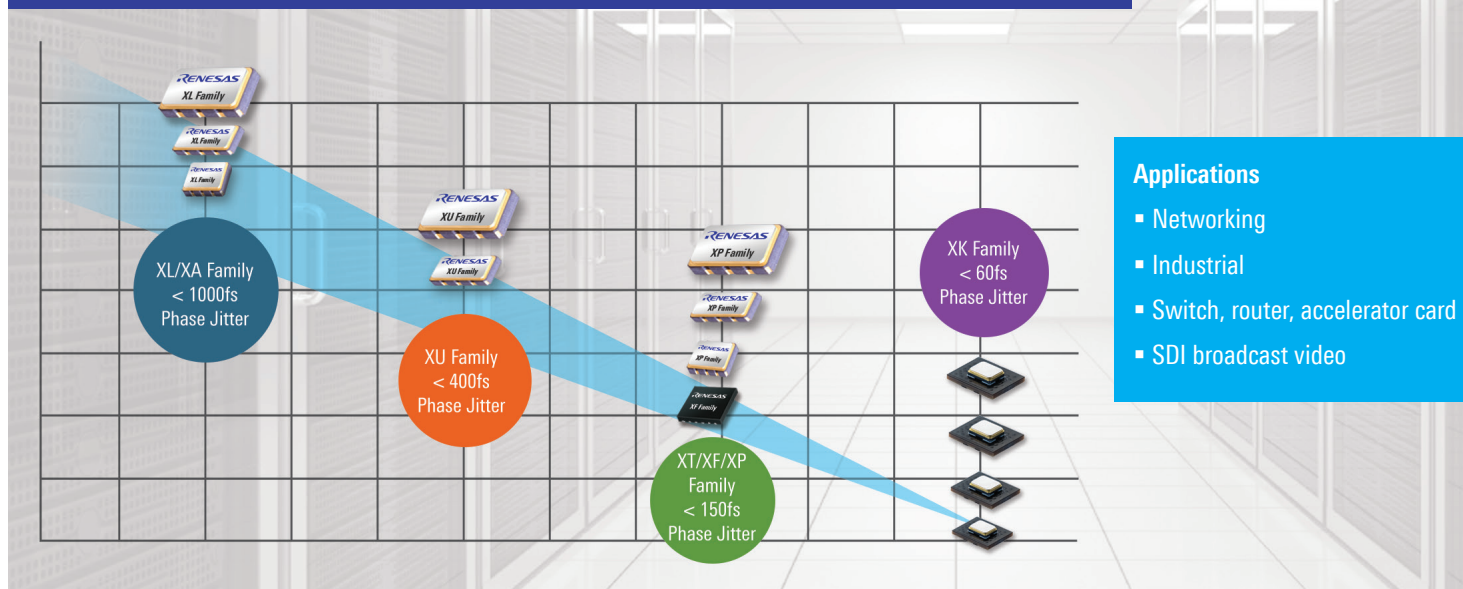


# PROXO2 HIGH-PERFORMANCE CLOCK OSCILLATOR FAMILY



- ### Applications
- Networking
  - Industrial
  - Switch, router, accelerator card
  - SDI broadcast video

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) +/-50ppm 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](https://renesas.com/customxo)

## Submit by Part Number

## OR: General Configuration & New Frequency Request

Progress 8 / 8

<b>Jitter (typical)</b> ⓘ <input type="radio"/> < 750fs to 890fs (AEC-Q200) <input type="radio"/> < 750fs to 890fs <input type="radio"/> < 300fs <input type="radio"/> < 150fs <input checked="" type="radio"/> < 60fs	<b>Package</b> ⓘ <input type="radio"/> 7 x 5 mm <input type="radio"/> 5 x 3.2 mm <input type="radio"/> 3.2 x 2.5 mm <input checked="" type="radio"/> <b>2.5 x 2 mm</b> <input type="radio"/> 2.0 x 1.6 mm <input type="radio"/> 1.8 x 1.4 mm	<b>OE Position</b> ⓘ <input type="radio"/> Pin 1 - Active High <input type="radio"/> Pin 2 - Active Low <input checked="" type="radio"/> <b>Pin 2 - Active High</b> <input type="radio"/> Pin 2 - Active Low <input type="radio"/> Pin 5 - Active High	<b>Voltage</b> ⓘ <input type="radio"/> 3.3 V <input checked="" type="radio"/> <b>2.5 V</b> <input type="radio"/> 1.8 V
<b>Fsel Frequency (MHz) Output Type</b> Configuration 1 Low <input type="text" value="100"/> <input type="text" value="LVDS"/> Configuration 2 Float <input type="text" value="100"/> <input type="text" value="LVDS"/> Configuration 3 High <input type="text" value="100"/> <input type="text" value="LVDS"/> <input type="button" value="Clear frequency and output selection"/>		<b>Stability</b> ⓘ <input type="radio"/> ± 100 ppm <input checked="" type="radio"/> <b>± 50 ppm</b> <input type="radio"/> ± 50 ppm APR (VCXO) <input type="radio"/> ± 30 ppm <input type="radio"/> ± 25 ppm <input type="radio"/> ± 20 ppm <input type="radio"/> ± 3 ppm (TCXO)	<b>Temperature</b> ⓘ <input type="radio"/> -20°C to +70°C <input checked="" type="radio"/> <b>-40°C to 85°C</b> <input type="radio"/> -40°C to +105°C

To request samples, download documentation or learn more, visit: [renesas.com/xo](https://renesas.com/xo)



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