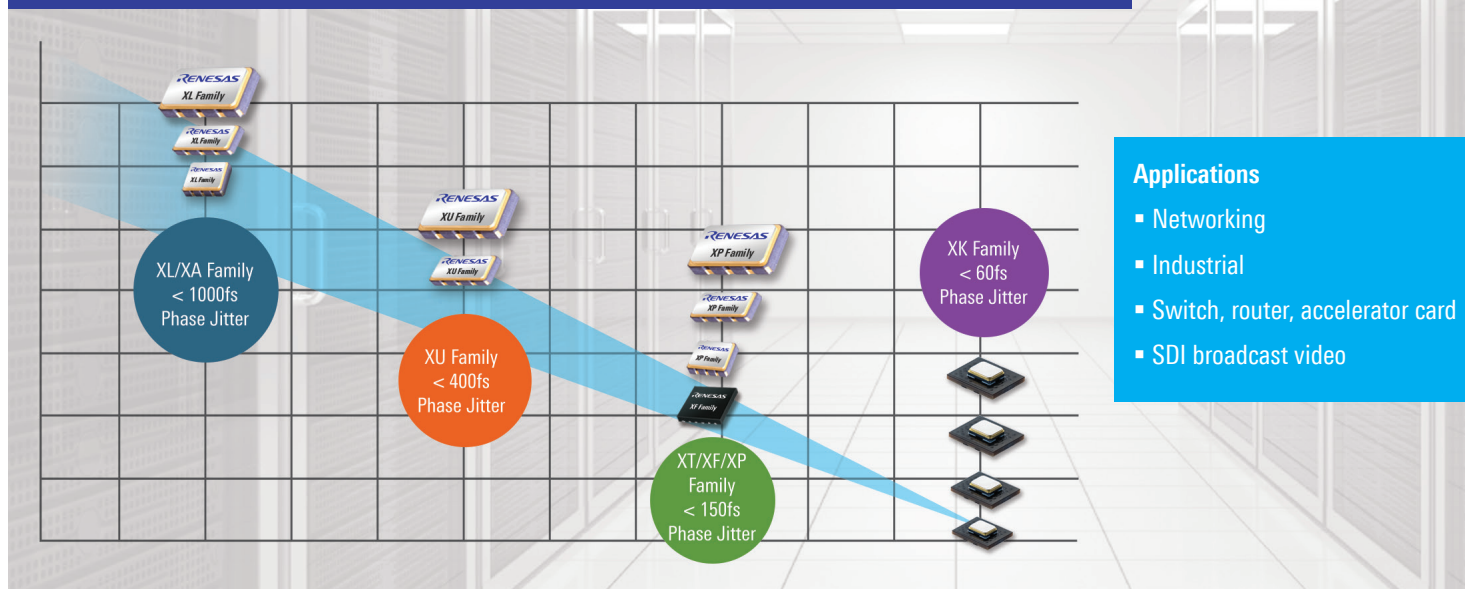


# PROXO2 HIGH-PERFORMANCE CLOCK OSCILLATOR FAMILY



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) +/-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

### Jitter (typical) i

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

### Package i

- 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 i

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

### Voltage i

- 3.3 V
- 2.5 V
- 1.8 V

### Fsel Frequency (MHz) Output Type

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"/>

Clear frequency and output selection

### Stability i

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

### Temperature i

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

Preview Configuration

Reset Configuration



Renesas Electronics America Inc. | [renesas.com](https://renesas.com)  
915 Murphy Ranch Road, Milpitas, CA 95035 | Phone: 1-888-468-3774

© 2023 Renesas Electronics America Inc. (REA). All rights reserved. All trademarks are the property of their respective owners. REA believes the information herein was accurate when given but assumes no risk as to its quality or use. All information is provided as-is without warranties of any kind, whether express, implied, statutory, or arising from course of dealing, usage, or trade practice, including without limitation as to merchantability, fitness for a particular purpose, or non-infringement. REA shall not be liable for any direct, indirect, special, consequential, incidental, or other damages whatsoever, arising from use of or reliance on the information herein, if advised of the possibility of such damages. REA reserves the right, without notice, to discontinue products or make changes to the design or specifications of its products or other information herein. All contents are protected by U.S. and international copyright laws. Except as specifically permitted herein, no portion of this material may be reproduced in any form, or by any means, without prior written permission from Renesas Electronics America Inc. Visitors or users are not permitted to modify, distribute, publish, transmit or create derivative works of any of this material for any public or commercial purposes.