

## **KEY FEATURES**

- Available in HCMOS, LVPECL, LVDS, and HCSL outputs
- XU Family has 300 fs typ. RMS phase jitter (12kHz – 20MHz), reduces overall system noise and meets next-generation networking and communications requirements
- The XL family has 750 fs typ RMS Phase Jitter (12kHz – 20MHz) with extremely low cost meeting the requirements of 1G/10G Ethernet, 2G/4G/8G Fibre Channel; 1.5G/3G/6G SAS/SATA, 10G Infiniband, PCI Express® Gen1/Gen2
- Frequency Stability: ± 20ppm, ± 25ppm, ± 50ppm, or ± 100ppm
- Fast lead times for custom frequencies from 16kHz to 1.5GHz
- Industry-standard packages (3.2 x 2.5 mm, 5 x 3.2 mm, 7 x 5 mm) and pin-outs
- The XU and XL from IDT have the performance, price, and delivery to meet your design requirements

## **APPLICATIONS**

- Networking
- Communications
- Data I/O
- Storage
- Servers

## IDT's crystal oscillators offer designers a reliable and economical timing solution.

The XU Family of devices from IDT is a low phase noise crystal-based PLL oscillator supporting a large range of frequencies and output waveform types. These devices are available in multiple package sizes as well as temperature grades.

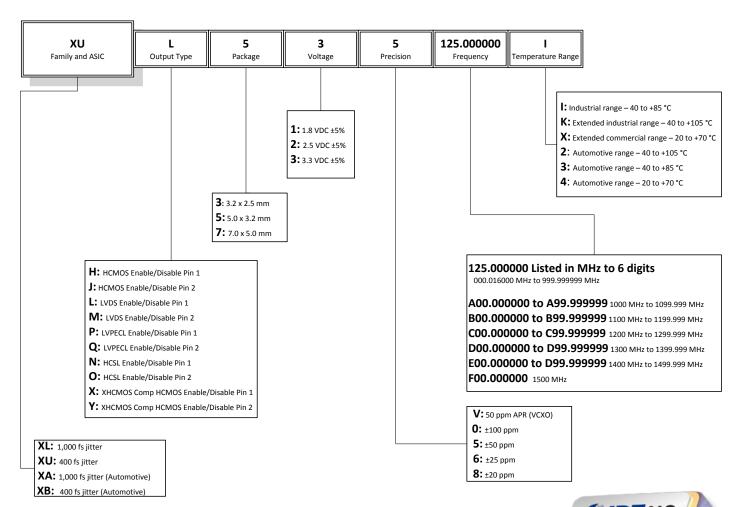
With a patented one-time program (OTP) allowing for infinite memory shelf life, the XU devices can be accurately programmed from 16kHz to 1,500MHz with frequency resolution down to 1 Hz accuracy. The configuration capability of this family of devices allows for fast delivery times for both sample and large manufacturing orders.

	IDT XO XU 156.25 MHz	IDT XO XL 312.5 MHz
Package Options	5 x 3.2 mm, 7x5 mm	3.2 x 2.5 mm, 5 x 3.2 mm, 7 x 5 mm
Voltage Options	1.8V, 2.5V, 3.3V	2.5V, 3.3V
Phase Jitter (12kHz - 20 MHz)	< 400fs	< 1ps
Outputs	LVDS, LVPECL, HCSL, HCMOS	LVDS, LVPECL, HCMOS
Frequency Range	0.016 - 1500 MHz	0.75 - 1350 MHz
Delivery	Samples in 2 weeks	Samples in 2 weeks





## Family of High-Performance Crystal Oscillators



Part Number	Output Type	Frequency (MHz)
XUL536100.0000001	LVDS	100.000
XUL536125.0000001	LVDS	125.000
XUL536150.0000001	LVDS	150.000
XUL536156.2500001	LVDS	156.250
XUL536212.5000001	LVDS	212.500
XUP536100.000000I	LVPECL	100.000
XUP536125.000000I	LVPECL	125.000
XUP536150.000000I	LVPECL	150.000
XUP536156.250000I	LVPECL	156.250
XUP536212.500000I	LVPECL	212.500
XUN536100.0000001	HCSL	100.000
XUN537133.333000I	HCSL	133.333



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