



PRONTO™

- Samples ready as little as 1 day
- Strong driving power
- EMI reduction capability
- Flexible frequency

Pletronics PRONTO™ Configurable XO Series: Flexible Frequency with Rapid Delivery

The Pletronics PRONTO™ configurable crystal oscillator (XO) series provides engineers with a flexible, high-performance timing solution designed to support rapid development cycles and demanding system requirements.

Custom Frequencies with Fast Turnaround

PRONTO is a PLL-based configurable XO series where finished devices are stocked and programmed in-house. This enables precise frequency selection with industry-leading lead times: samples can be available in as little as one day, with typical delivery of about one week for small pilot quantities. This capability allows engineers to obtain exact frequencies quickly, accelerating design verification and shortening time-to-market.

Strong Output Drive for Superior Signal Integrity

PRONTO configurable XO's provide high output-drive, ensuring reliable clock signals and stable signal integrity in designs with heavy loading, long PCB traces, or non-ideal layouts.

The Pletronics PRONTO series combines frequency flexibility, robust signal integrity, and EMI optimization with rapid delivery, making it the ideal timing solution for modern electronic designs.

Integrated EMI Reduction

To support EMI-sensitive designs, PRONTO (CMOS XO series) offers a unique feature to tune output driving power, can effectively lower electromagnetic interference (EMI). This is particularly beneficial for critical applications such as medical equipment, fuel dispensers, and industrial control systems.

Versatile Configurations and High Performance

The PRONTO series supports extensive configuration options to fit industry-standard package footprints:

- **Frequency Range:**
 - CMOS: 1–160 MHz
 - Differential: 10–1500 MHz
- **Supply Voltage:** 1.8V to 3.3V
- **Package Sizes:** 2.0 × 1.6 mm to 7.0 × 5.0 mm
- **Low RMS Jitter:** 0.6ps (Differential), 1.0ps (CMOS) (Typical)
- **Stability:** Tight frequency stability across wide operating temperature ranges

Product Series Line Up

Product Series	Output Logic	Frequency Range	I _{dd} max (mA)	V _{DD} (V)	Integrated Phase Jitter (typ)	Package Size (mm)
QM22L	LVC MOS	1.0 to 160MHz	1.8V: 25mA 2.5V: 35mA 3.3V: 40mA	1.8V* 2.5V 3.3V	1.0ps	2.0 x 1.6
QM33L	LVC MOS	1.0 to 160MHz	1.8V: 25mA 2.5V: 35mA 3.3V: 40mA	1.8V* 2.5V 3.3V	1.0ps	2.5 x 2.0
QM44L	LVC MOS	1.0 to 160MHz	1.8V: 25mA 2.5V: 35mA 3.3V: 40mA	1.8V* 2.5V 3.3V	1.0ps	3.2 x 2.5
QM55L	LVC MOS	1.0 to 160MHz	1.8V: 25mA 2.5V: 35mA 3.3V: 40mA	1.8V* 2.5V 3.3V	1.0ps	5.0 x 3.2
QM77L	LVC MOS	1.0 to 160MHz	1.8V: 25mA 2.5V: 35mA 3.3V: 40mA	1.8V* 2.5V 3.3V	1.0ps	7.0 x 5.0
QL44L 2.5V/3.3V	LVDS	10 to 1500MHz	2.5V: 45mA 3.3V: 50mA	2.5V 3.3V	0.6ps	3.2 x 2.5
QL55L 2.5V/3.3V	LVDS	10 to 1500MHz	2.5V: 50mA 3.3V: 50mA	2.5V 3.3V	0.6ps	5.0 x 3.2
QL77L 2.5V/3.3V	LVDS	10 to 1500MHz	2.5V: 50mA 3.3V: 50mA	2.5V 3.3V	0.6ps	7.0 x 5.0
QP44L 2.5V/3.3V	LVPECL	10 to 1500MHz	2.5V: 45mA 3.3V: 50mA	2.5V 3.3V	0.6ps	3.2 x 2.5
QP55L 2.5V/3.3V	LVPECL	10 to 1500MHz	2.5V: 50mA 3.3V: 50mA	2.5V 3.3V	0.6ps	5.0 x 3.2
QP77L 2.5V/3.3V	LVPECL	10 to 1500MHz	2.5V: 50mA 3.3V: 50mA	2.5V 3.3V	0.6ps	7.0 x 5.0

*Note: 125MHz is the max frequency limit for 1.8V operation

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