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FOR IMMEDIATE RELEASE

New High Performance PLL-Based Crystal Oscillators

Lisle, IL – CTS Corporation (NYSE: CTS) announces the addition of two new high performance PLL-based quartz crystal oscillator products. The CC Series clock oscillator [XO] and CV Series voltage control oscillator [VCXO] utilize the latest IC technology to provide a high frequency, ultra-low jitter platform that covers virtually any frequency up to 2.1GHz.

The new product series additions are available in three compact hermetically sealed ceramic SMD package sizes; delivers standard HCMOS or LVPECL and LVDS differential outputs, input voltages, frequency stabilities, and temperature grades. The CV Series includes customer access to an external voltage control pin, allowing for output frequency adjustment [pullability] to ±150ppm.

The CC and CV platform attributes allow the engineer flexibility in application design, while providing a solution with short lead-time and low cost. Standard product features, common market applications and new series parameters are summarized below. Please refer to individual data sheets on our website to view more performance characteristics.

CC Series: <https://www.ctscorp.com/wp-content/uploads/CC.pdf>

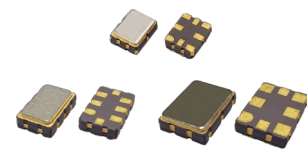
CV Series: <https://www.ctscorp.com/wp-content/uploads/CV.pdf>

Product Features

- Wide Frequency Range, to 2.1GHz
- Low-Noise PLL IC
- Voltage Control Function [CV]
- HCMOS; LVPECL or LVDS Complimentary Outputs
- Quartz Crystal Based
- Low Phase Jitter Performance
- +1.8V, +2.5V or +3.3V Operation
- Output Enable Standard
- Tape and Reel Packaging

- Small Ceramic Surface Mount Package Options

- 3.2mmx2.5mm - 5.0mmx3.2mm - 7.0mmx5.0mm



- Common Frequencies Available

- 100.000000MHz - 125.000000MHz - 156.250000MHz - 250.000000MHz
 - 106.250000MHz - 150.000000MHz - 200.000000MHz - 312.500000MHz
 - 122.880000MHz - 155.520000MHz - 212.500000MHz - 622.080000MHz - 644.531250MHz

[Consult data sheets and contact factory for availability of frequencies not listed.]

Market Applications

- IoT & Industrial IoT [IIoT]
- Mobile Multimedia
- Wireless Communications
- Ethernet/Gbe/SyncE
- Audio/Video Systems
- SerDes
- FPGA/Microcontrollers
- M2M Communication
- Computer Peripherals
- Gateway Communication
- Medical Electronics
- Broadband Access
- Storage Area Networking
- Fiber Channel
- SONET/SDH/DWDM
- Commercial Military/Aerospace
- Industrial Controls
- Test and Measurement



Product Summary

[Selector Guides](#)

[Clock Oscillator](#)

| MODEL | PACKAGE SIZE [mm] | OUTPUT LOGIC | FREQUENCY [MHz] | SUPPLY VOLTAGE * | STABILITY | TEMPERATURE RANGE | PHASE JITTER [fs] |
|----------------|-------------------|----------------|-----------------|------------------|------------------|----------------------------------|----------------------------|
| CC32P CC32L | 3.2 x 2.5 | LVPECL LVDS | 100 – 2,100 | 1.8V | ±25ppm ±50ppm | -20°C to +70°C -40°C to +85°C | 150 typical 300 maximum |
| CC50P CC50L | 5.0 x 3.2 | | | 2.5V | | | |
| CC70P CC70L | 7.0 x 5.0 | | | 3.3V | | | |

*1.8V LVDS Output Only

https://www.ctscorp.com/connect_product_line/clock-oscillators/

Voltage Controlled Oscillator

| MODEL | PACKAGE SIZE [mm] | OUTPUT LOGIC | FREQUENCY [MHz] | SUPPLY VOLTAGE * | STABILITY | TEMPERATURE RANGE | PULLABILITY MAXIMUM | PHASE JITTER [fs] |
|-------------------------|-------------------|-------------------------|-----------------|------------------|------------------|----------------------------------|---------------------|----------------------------|
| CV50C CV50P | 5.0 x 3.2 | HCMOS LVPECL LVDS | 15 – 2,100 | 1.8V | ±25ppm ±50ppm | -20°C to +70°C -40°C to +85°C | ±100ppm ±150ppm | 150 typical 300 maximum |
| CV50L | 7.0 x 5.0 | | | 2.5V | | | | |
| CV70C CV70P CV70L | | | | 3.3V | | | | |

*1.8V LVDS Output Only

https://www.ctscorp.com/connect_product_line/vcxo/

Sales Contact

Production volume and samples are available now. For more information see our website to generate a sales inquiry, to contact a CTS Sales Representative, or contact one of CTS’s many distribution partners.

<https://www.ctscorp.com/contact/>

About CTS

CTS (NYSE: CTS) is a leading designer and manufacturer of products that Sense, Connect, and Move. The company manufactures sensors, actuators, and electronic components in North America, Europe, and Asia, and provides engineered products to customers in the aerospace/defense, industrial, medical, and transportation markets.

For more information on CTS Corporation, please visit www.ctscorp.com

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