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FOR IMMEDIATE RELEASE

## Low Jitter Clock Portfolio Expansion

**Hopkinton, MA** – CTS Corporation (NYSE: CTS) announces three new models added to its family of high frequency low jitter Clock oscillators. Model 638 [7.0x5.0mm] and Model 655 [5.0x3.2mm] offer 100fs phase jitter performance for standard frequencies between 125MHz and 170MHz. Model 633 [3.2x2.5mm] features clock rates between 10MHz through 220MHz and phase jitter performance less than 500fs throughout the frequency range. All three models are available with LVPECL or LVDS outputs, typical stability options of ±20, ±25 and ±50ppm and +2.5V or +3.3V operation.

In addition to this new product release, two existing models are being upgraded: The frequency range for Model 637 and Model 653 will be offered at frequencies as low as 10MHz, while the phase jitter for Model 653 was improved to level reaching 500fs maximum over its frequency range.

All models within CTS’ low jitter clock portfolio provide the design engineer a low cost, miniature size solution, along with high performance capabilities suitable for complex electronic systems’ requirements. The new clock models support a wide array of market segments; covering infrastructure telecommunication networking, server applications, test and measurement, medical test equipment and much more; delivering superior phase jitter performance and a high level of frequency stability.

Standard product features, common market applications and new series platforms are summarized below. Please refer to individual data sheets on our website to see more performance characteristics.

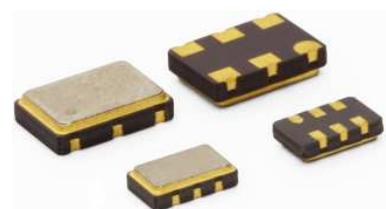
### Product Features

- Ultra-Low Phase Jitter Performance
- Fundamental or 3rd Overtone Crystal
- Small Ceramic Surface Mount Packages
  - 7.0mmx5.0mm - 5.0mmx3.2mm - 3.2mmx2.5mm
- Standard Frequencies Available
 

- 25.00MHz	- 125.00MHz	- 161.1328MHz	- 212.50MHz
- 50.00MHz	- 155.52MHz	- 187.50MHz	- 250.00MHz
- 100.00MHz	- 156.25MHz	- 200.00MHz	- 312.50MHz
- Output Enable Standard
- Tape and Reel Packaging
- Output Types Available
  - LVPECL - LVDS

### Market Applications

- Serializer/Deserializer [SerDes]
- Storage Area Networking
- Broadband Access
- SONET/SDH/DWDM
- PON
- Ethernet/GbE/SyncE
- Fiber Channel
- Test and Measurement





## Product Summary

### Clock Selector Guide

MODEL	PACKAGE SIZE [mm]	OUTPUT LOGIC	FREQUENCY [MHz]	PHASE JITTER [fs Max]	TOTAL STABILITY	SUPPLY VOLTAGE	TEMPERATURE RANGE
638 655	7.0 x 5.0 5.0 x 3.2	LVPECL LVDS	80 – 170	100 Typ. 200 Max.	±20ppm ±25ppm ±50ppm ±100ppm	2.5V 3.3V	-20°C to 70°C -40°C to 85°C
637 653	7.0 x 5.0 5.0 x 3.2	LVPECL LVDS	10 – 320	500	±20ppm ±25ppm ±50ppm ±100ppm	2.5V 3.3V	-20°C to 70°C -40°C to 85°C
633	3.2 x 2.5	LVPECL LVDS	10 – 220	500	±20ppm ±25ppm ±50ppm ±100ppm	2.5V 3.3V	-20°C to 70°C -40°C to 85°C

[http://www.ctscorp.com/connect\\_product\\_line/clock-oscillators/](http://www.ctscorp.com/connect_product_line/clock-oscillators/)

### Sales Contact

Production volume and samples are available now. For more information call +1-800-982-5737 (North America), +65-6481-1466 (Asia) or +1-508-435-6831 (all other regions), E-mail: [frequencysales@ctscorp.com](mailto:frequencysales@ctscorp.com), see our website for more information as well as to contact a supporting CTS Sales Representative or one of CTS' many distribution partners.

### About CTS

CTS (NYSE: CTS) is a leading designer and manufacturer of sensors, actuators and electronic components to OEMs in the aerospace, communications, defense, industrial, information technology, medical and transportation markets. CTS manufacture products in North America, Europe and Asia.

For more information on CTS Corporation, please visit [www.ctscorp.com](http://www.ctscorp.com)

### Media Relations Contact

Nick Hajewski  
Marketing Communications Manager

E-mail: [nick.hajewski@ctscorp.com](mailto:nick.hajewski@ctscorp.com)

Telephone: +1 (630) 577-8865

CTS Corporation  
2375 Cabot Drive  
Lisle, IL 60532  
USA

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