



March 15, 2021

Subject: Tuning Fork - TF, TFA, TFE, TFNC, TFPM, TFPMN, and TFSM

Dear valued customer

CTS, a manufacturer and a supplier of precision quartz-based timing device, regret to announce a shortage and a disruption in supply to selective tuning fork crystal in the global market. This unfortunate shortage situation affects number of 32.768KHz crystal families within CTS's portfolio. Affected models include tuning fork crystals within TF families (re. TF, TFA, TFE, TFNC, TFPM, TFPMN, and TFSM models- [Frequency Control CTS Corporation](#) ). This disruption is caused due to exceeding high global demand for time keeping crystal devices at 32.768KHz used in microcontrollers and microprocessors. The high demand is primarily driven by high demand for consumer, automotive, industrial and data center applications. It is expected the disruption and long L/T situation will last for the next 15~18 months or Q3/2022. As a result, CTS regrets to announce that it will not be able to accept any new order until the supply situation stabilizes. Our teams will continue to monitor the situation as it develops. Please feel free to contact us with any questions or concerns, and we will do our outmost to assist.

We are sorry for the inconvenience and appreciate the understanding.

Sincerely

Ronen Cohen

Sr. Product manager – Precision Timing and RF devices.