

Hexius Semiconductor's Thermal Management IC products are next generation programmable mixed-signal ICs primarily intended for TCXO and OCXO applications. They feature higher levels of integration and software driven functionality to generate reference clock signals, monitor & control thermal environments and adjust analog circuitry for high frequency stability applications. Compatible with various crystal types, the TM Series of products make TCXO and OCXO modules IC-centric to lower cost, increase adaptability, and streamline manufacturing.

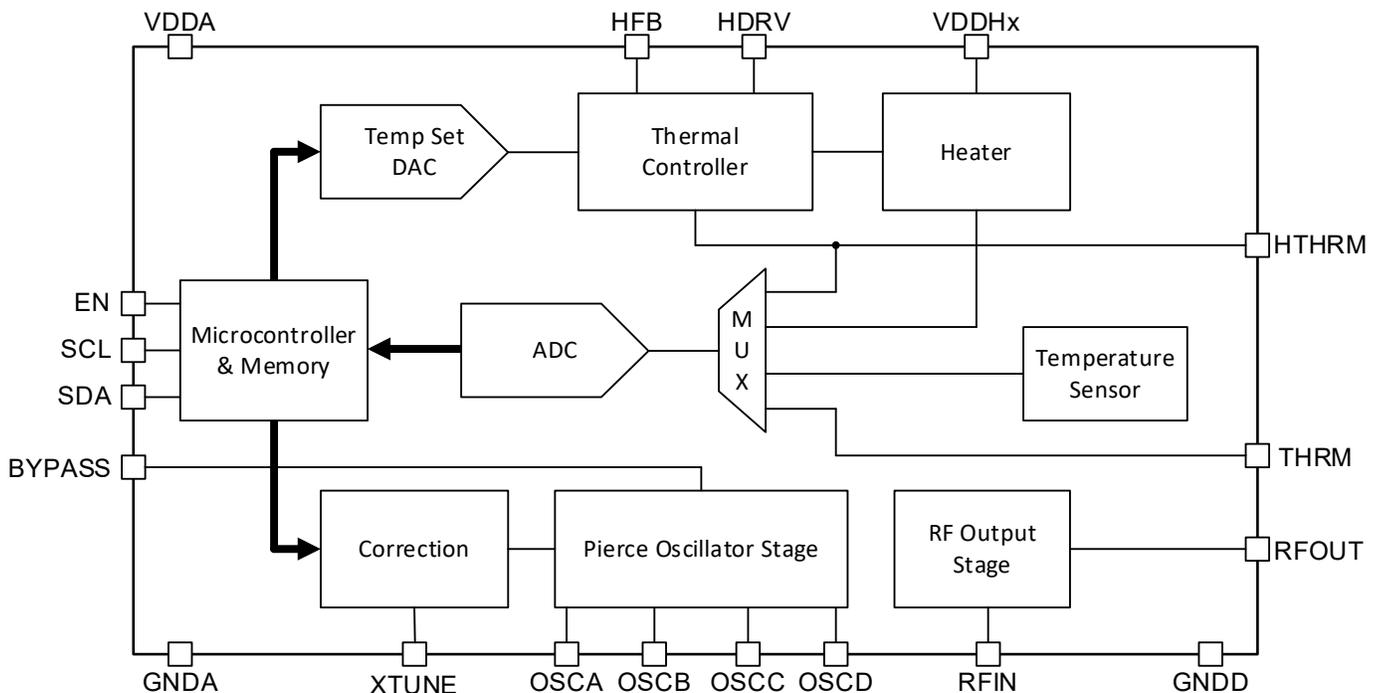
The TM Series' versatile structure also makes them suitable for many other applications including environmental control systems, precision measurement and any other application where temperature coefficients adversely affect the performance of the system.

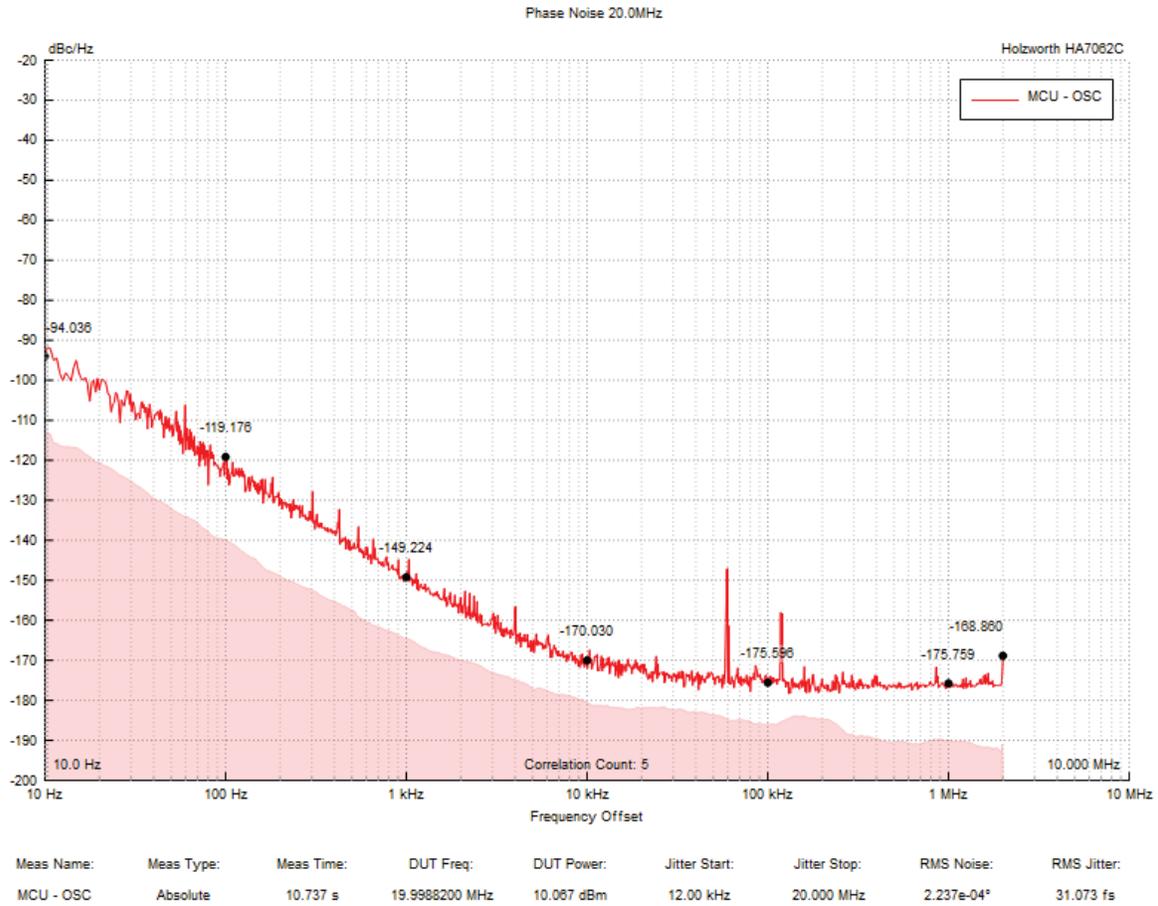
Features

- Integrated low phase noise oscillator
- Low Allan deviation for high stability clocks
- High accuracy temperature sensor
- Customizable correction algorithms
 - Polynomial curve fits
 - Lookup Table
 - Adjustable timing parameters
- Integrated Thermal Controller
- Controls integrated 1W or external heater
- Extended Temp Range: -55°C to 125°C

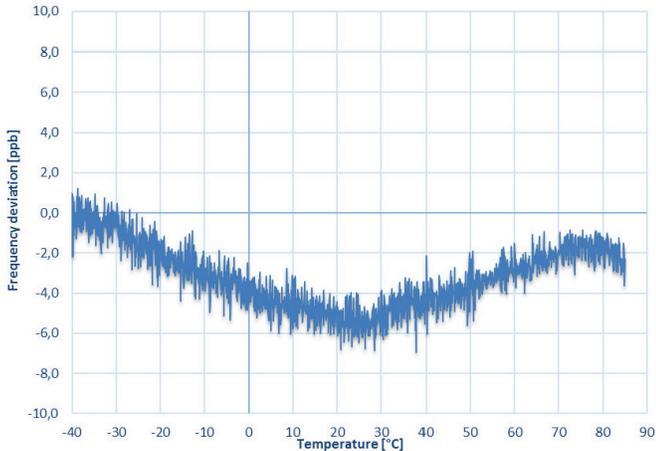
Applications

- TXCO Modules
- OCXO Modules
- Thermal Protection & Management
- Environmental Control Systems
- Precision Measurement

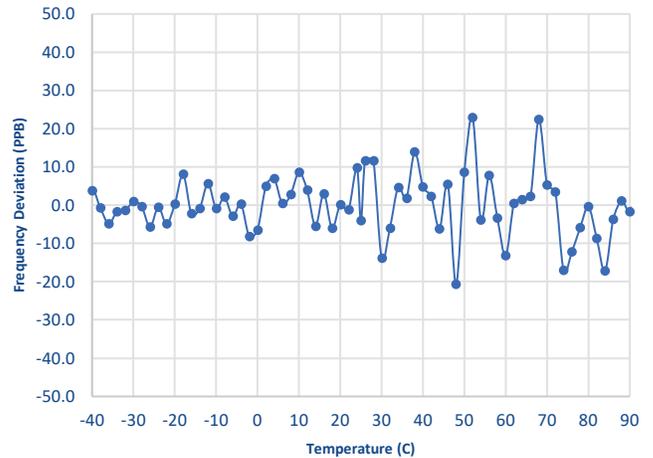




20MHz Phase Noise Plot



OCXO Frequency Deviation



TCXO Frequency Deviation

Part Number	Integrated Oscillator	Internal Temp Sensor	Thermal Controller	Integrated Heater	Output Stage	Application	Supply Voltage
TM100	Pierce, up to 155MHz	Yes	N/A	N/A	Dividers, CMOS	TCXO	3.3V
TM200	Pierce, up to 155MHz	Yes	Yes	1W	Dividers, CMOS	OCXO	3.3V