



Open RAN (ORAN) - Macro and Small Cells

SiTime MEMS timing benefits

Complete MEMS clock tree

- Precision MEMS TCXO
- Stratum 3E MEMS OCXO
- MEMS clock IC/PLL

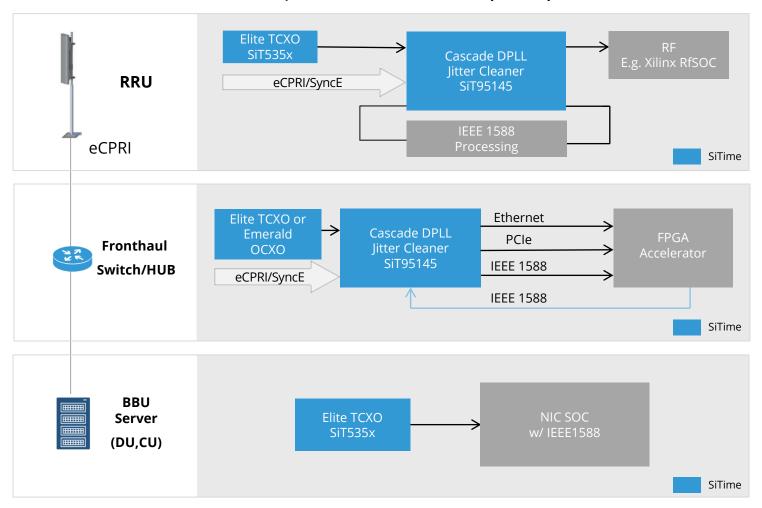
Most Robust in real world conditions

- 4x better dF/dT for accurate IEEE1588
- Resistant to airflow, heat, vibration
- Smart clock monitoring and hitless switching for redundancy

Integrated MEMS, easy to use

- No external quartz
- No quartz reliability issues
- No cover or shielding needed

ORAN RRU, Fronthaul HUB and BBU (DU/CU)

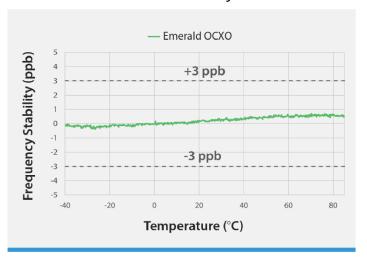


Application	Devices	Туре	Function	Key Features
NIC	<u>SiT535x</u>	Super-TCXO	IEEE1588 and high speed SERDES reference clock	20 MHz, ±20 ppb up to 70 °C, operable to 105°C
ORAN RRU & Fronthaul HUB	<u>SiT535x</u>	Super-TCXO	Reference clock for jitter cleaner and IEEE1588	1 to 220 MHz, ±100 ppb, ±1 ppb/°C 105°C
	SiT57xx	OCXO		1 to 60 MHz, ±5 ppb, ±0.04 ppb/°C
	<u>SiT95147</u>	Jitter cleaner	Ethernet, processor	4-in, 11-out, 4-PLL, 8 kHz to 2.1GHz

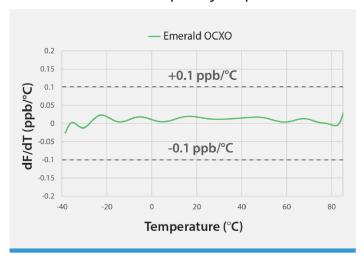


MEMS Timing Outperforms Quartz

Better Stability



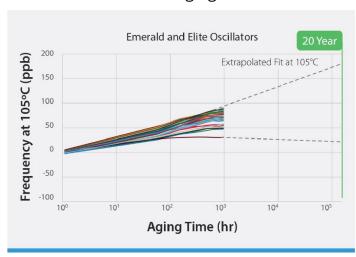
Better Frequency Slope



Better Vibration Resistance



Better Aging



Better Allan Deviation



Better PSNR (Power Supply Noise Rejection)

