



**SKYWORKS®**

## **Synchronize Ultra Reliable 5G Networks and Beyond**

 AccuTime  NetSync

Precise and accurate time synchronization is critical to ultra-reliable 5G network operation and is paving the way for future enhancements that empower 5G to support autonomous vehicles, factory automation, telemedicine and other emerging applications.

The Skyworks NetSync™ synchronization clocks work with the Skyworks AccuTime™ IEEE 1588 software to meet the unique 5G synchronization needs of mobile operators and equipment vendors, offering compliance to all relevant telecom standards, including ITU-T G.826x/G.827x, IEEE 1588-2008/2019 and O-RAN WG4.

[skyworksinc.com](https://skyworksinc.com)

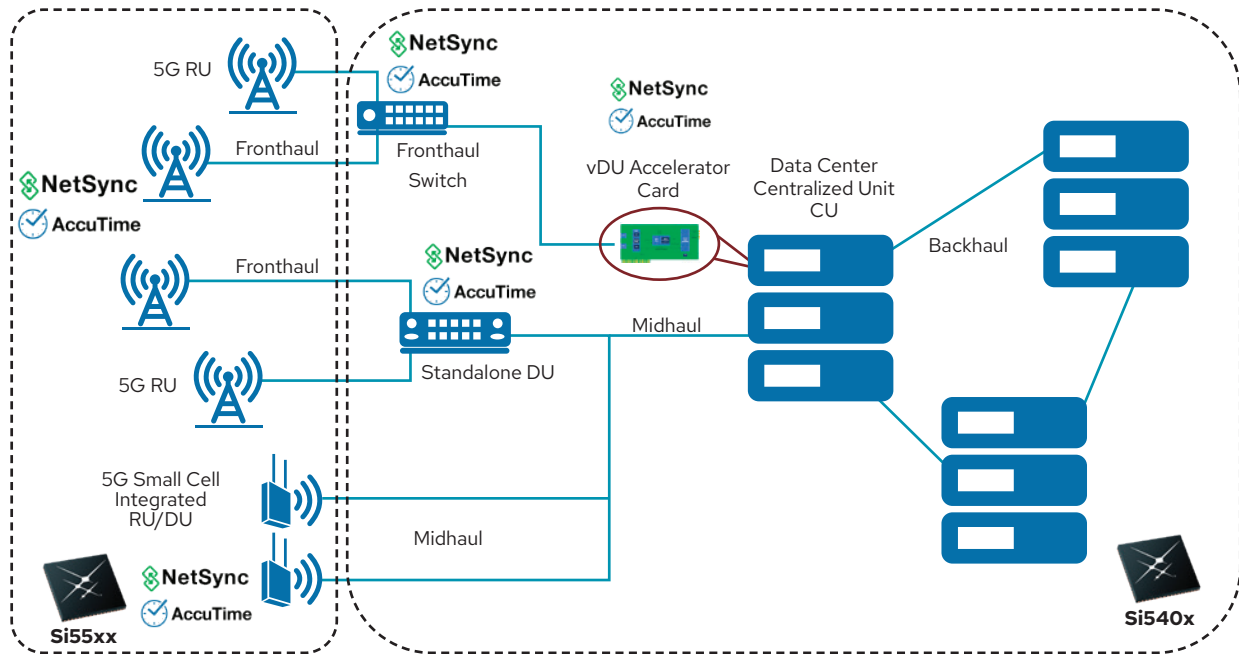


SKYWORKS®

# Featured Products

Si5518/12 and Si5403/02/01 and Skyworks AccuTime™ Software

NetSync™ Network Synchronizer Clock for 5G/SyncE/IEEE 1588 Applications



## Features

- Utilizes fifth generation DSPLL® and MultiSynth™ technologies
  - Ultra-high-performance clock generation for LTE-A and 5G fronthaul networks
- Output frequencies from 0.5 Hz (PP2S) up to 3.2 GHz
- JESD204B/C clock generation with synchronization across multiple devices
- Ultra-low jitter: <55 fs RMS typ.
- Phase Noise:
  - Noise floor: < -164 dBc/Hz at 491.52 MHz
  - -145 dBc/Hz at 800 kHz offset for a 491.52 MHz carrier frequency
  - Spurs < -95 dBc
- Input hitless switching with <50 ps typ. phase transient for fault-tolerant operations
- DCO frequency adjustment with part per trillion-order resolution to support IEEE 1588 with external software
- Split digital/analog dual-board radio support in conjunction with Si5508/10

## Skyworks AccuTime™ Software

- Fully-featured IEEE 1588 solution with PTP stack and time recovery servo for full timing support, partial timing support and APTS networks
- Advanced servo algorithm provides PDV noise filtering to meet the needs of real-world networks, achieving greater than 10x the performance of open-source solutions
- Ability to be used in Class C and Class D Telecom Boundary and Slave Clocks, supports O-RAN enhanced O-RU
- Available for multiple CPU architectures, including ARM (64 and 32 bit), running Linux or other operating systems
- Demonstration platforms, including performance reports and porting guidelines, available to show NetSync™ and AccuTime™ integration with common platforms such as the AMD MPSoC/RFSoc family and NXP Layerscape CPUs