

# **Timing**

# Solutions for Industrial, Automotive, Infrastructure, and Communication Applications

Our patented DSPLL® and MultiSynth™ technologies combine best-in-class frequency flexibility with the lowest jitter in the industry, delivering quick-turn, customized solutions that simplify board design, reduce discrete components, and maximize system performance. We offer an unparalleled selection of crystal oscillators, clock generators, clock buffers, jitter attenuators, network synchronizers, and PCI Express (PCIe) clock generators and buffers.



# **Timing Products**

Skyworks offers a broad portfolio of timing products that enable hardware designers to simplify clock generation, clock distribution, jitter attenuation, and network synchronization. These products combine best-in-class jitter performance and frequency flexibility, enabling customers to easily architect optimized clock tree solutions. Custom samples are available within one to two weeks, easing design and reducing time-to-market.







Clock Buffers



SyncE/IEEE 1588 Clocks, Software



Jitter Attenuating Clocks



Wireless Clocks

## **Timing Applications**



- Enterprise routers
- Cable/DSL
- · PON



- Radio units (RU)
- Baseband units (BBU)
- O-RAN back-haul/mid-haul/ front-haul (O-RU, O-DU, O-CU)
- Small cells/DAS/picocells



- Data center switches/servers
- · Storage/security
- Search acceleration
- · Machine learning
- Edge/cloud computing



- · Broadcast video
- Industrial automation
- · Medical imaging
- · Test and measurement
- Aerospace and defense



- · Data center interconnect
- 100G/400G/800G/1.2T Optical transport
- · WDM
- Carrier Ethernet



- ADAS/automated driving
- Networking gateways
- Zonal/domain controllers
- · Centralized compute
- Lidar and vision systems
- · V2X/digital cockpit

## **Featured Products**

## **Optimize Your System Performance with our Clock Tree Solutions**

### Si5360/SKY62101 Clock Generators

- Single-IC solution
- Generates Ethernet, PCIe Gen 1-7, system clocks
- Ultra-low jitter: 55 fs RMS
- 12 and 18-outputs, any frequency, any format

#### SKY53510/80/40 Clock Buffers

- Guaranteed ultra-low additive jitter: <50 fs
- Universal format translation: LVPECL, LVDS, HCSL
- 10, 8, or 4 outputs for flexible clock trees
- Lowest-power, high-performance buffers support 1.8, 2.5, and 3.3 V
- Extended temperature range: -40 to 95 °C TAMB, 105 °C max TBOARD
- · Compatible with industry's latest PHY, switch, SoC, ASICs



#### SKY63104/5/6 Flash-Programmable Jitter Attenuating Clocks

- · Generates any combination of output frequencies
- Ultra-low RMS jitter: 55 fs (12 kHz to 20 MHz), 18 fs (4 MHz HPF)
- Proprietary 5th generation DSPLL® and MultiSynth™ technology
- 4 inputs, 12 outputs (LVPECL, LVDS, HCSL, LVCMOS selectable)
- Multi-profile support with external flash or internal NVM
- Ideal for clocking 56G/112G/224G SerDes, PCle Gen 1-7, PHY, switch, SoC, ASICs



Learn More





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