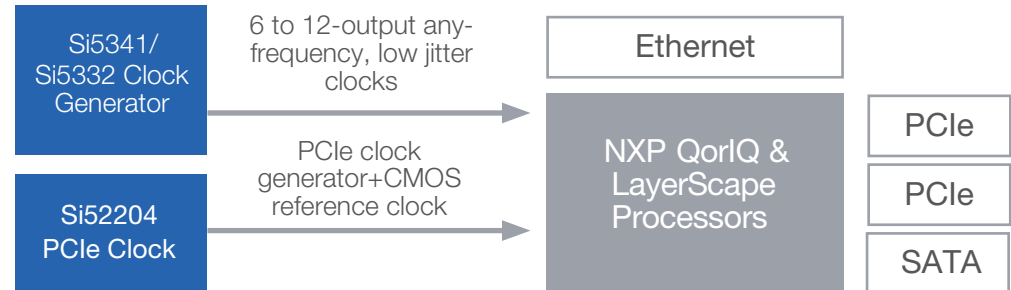


Timing Simplified

Silicon Labs offers a broad portfolio of frequency flexible timing products that enable hardware designers to simplify clock generation, distribution, and jitter attenuation. The portfolio includes:

- Network synchronizers
- Jitter attenuating clocks
- Clock generators
- Clock buffers
- PCIe clocks and buffers
- Oscillators (XO/VCXO)

Silicon Labs clocks use proprietary DSPLL and MultiSynth technologies to generate any combination of frequencies with ultra-low jitter, enabling best-in-class clock tree integration. Clock buffers provide low-jitter, low-skew clock distribution with integrated format/voltage level translation. PCIe clocks/buffers combine Gen 1/2/3/4/5 compliance with on-chip series termination, simplifying design. XO/VCXOs are factory-customizable to any frequency, with samples available in one to two weeks.



For more information related to reference designs or partner pricing, please contact your local Silicon Labs sales representative.



Oscillators

- Any frequency up to 3.0 GHz
- Ultra-low jitter: 80 fs RMS
- Short lead times: 1-2 weeks (samples)



Clock Generators

- Any-frequency, any-output
- Ultra-low jitter: 69 fs RMS
- Clock tree on a chip replaces clocks and XOs
- PCI Express Gen 1/2/3/4/5



Clock Buffers

- Integrated format/level translation
- Ultra-low additive jitter: 50 fs RMS
- PCI Express Gen 1/2/3/4/5 compliant



Jitter Attenuating Clocks/Network Sync

- Any frequency, any output
- Ultra-low jitter: 69 fs RMS
- Clock tree on a chip replaces clocks, XOs, VCXOs

Timing Solutions for QorIQ/LayerScape Processors



Application	NXP Part Number	Silicon Labs XO	Silicon Labs Clock Buffer		Silicon Labs Clock Generator	
			Multi-format outputs	PCIe	Multi-format outputs	PCIe
Telecom / Enterprise / Data Center Switches/routers Data center switches Storage Security	P10xx P20xx P30xx P40xx P50xx T10xx T20xx T4xxx LS10xx LS20xx LS21xx	Si54x	Si5330x	Si5135x	Si5431 Si5332	Si5214x Si5220x
Industrial Industrial switches, routers Motion control, robotics Medical imaging Defense and avionics Satcomm	P10xx P20xx T10xx T20xx	Si51x	Si5330x	Si5135x	Si5332 Si535x (CMOS only)	Si5214x Si5220x
Consumer	LS1012A LS1024A	Si51x	Si5330x	Si5135x	Si5332 Si535x (CMOS only)	Si5214x Si5220x

For more information, visit www.silabs.com/timing

Request a custom clock or XO/VCXO at www.silabs.com/custom-timing