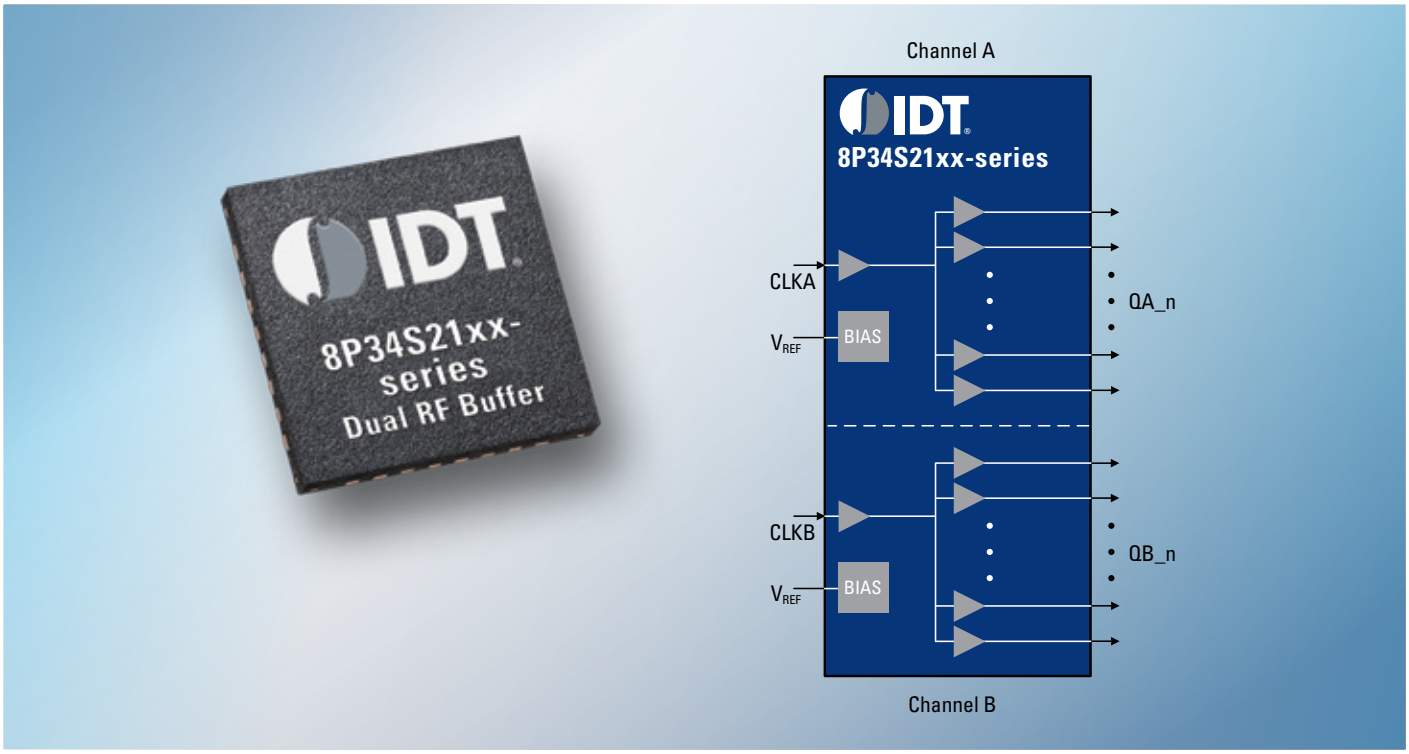
Integrated Device Technology

8P34S21xx-series 1.8V Dual RF Clock / Data Fanout Buffers



FEATURES

- Dual channel 1.8V RF Buffer
  - Matched propagation delay
  - Low skew across channels and devices
  - Maintains alignment between clock and data / synchronization signals
  - Excellent isolation between channels
  - LVDS I/O
- 4 family members with
  - 2x2 outputs: 8P34S2102
  - 2x4 outputs: 8P34S2104
  - 2x6 outputs: 8P34S2106
  - 2x8 outputs: 8P34S2108
- Excellent < -160dBc/Hz noise floor
- Reduced power consumption compared to 2.5V and 3.3V buffers
- Pin- and function-compatible with 2.5V and 3.3V buffer devices

TARGET MARKETS/APPLICATIONS

- Providing clock and synchronization signals to converters
- JESD204B (clock and SYSREF)
- Wireless base stations
- Communication infrastructure

The 8P34S21xx dual channel RF fanout buffers address the challenges of frequency and synchronization signal distribution in various applications in wireless/RF board designs, and in high performance RF converter clocking and JESD204B. The dual buffer function provides matched propagation delay parameters between channels making these devices an ideal solution when fanout of two different signals require staying in phase.

A 1.8V supply reduces power consumption compared to 2.5V and 3.3V RF buffers, with no compromise on AC parameters such as maximum frequency (2GHz) and with a noise floor of less than -160dBc/Hz.

The devices are pin- and function-compatible with the IDT 8SLVD (2.5V) and 8SLVP (2.5V, 3.3V) dual buffers. Designers can take advantage of the pin- and function-compatibility with standard RF buffer solutions and easily migrate to the new lower supply voltage and lower power devices.

A selectable output amplitude enables use of the devices in applications requiring a high amplitude application (500mV) to interface with LVPECL I/O at high clock frequencies. Other applications can take advantage of the 350mV amplitude setting for reduced power consumption.

To request samples, download documentation, or learn more, visit:
idt.com/go/rf-buffers