CF SERIES PRODUCT OVERVIEW
Clock Fanouts & Multiplexers

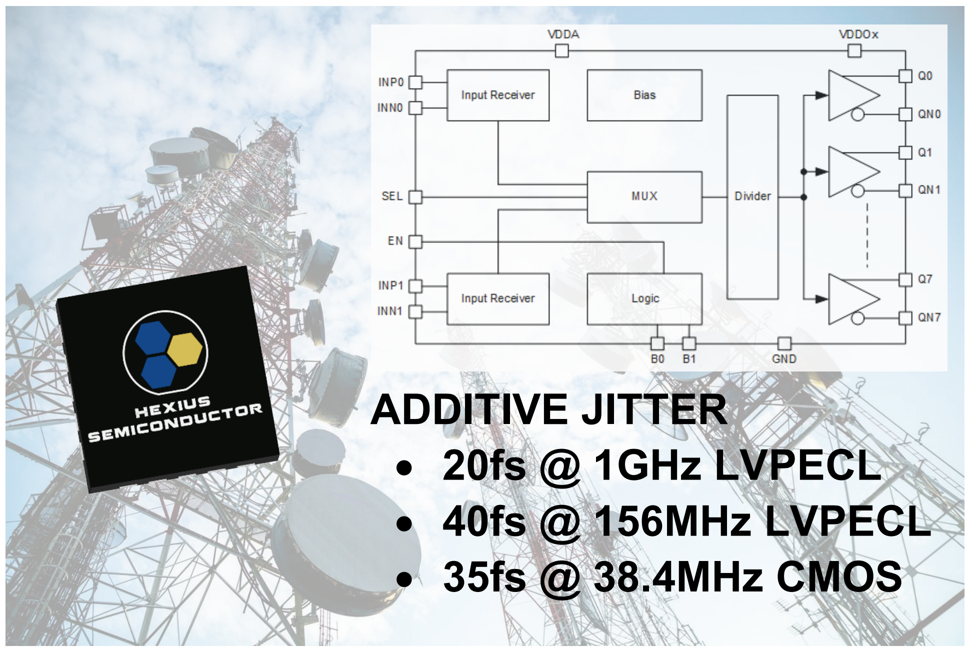
Hexius Semiconductor's configurable CF Series are an extremely low additive jitter clock fanout and multiplexer solution for jitter sensitive applications. The input receivers are very sensitive differential structures compatible with various input signal standards and can capture low amplitude signals (-26dBm). An internal divider circuit provides passthrough or synchronous frequency division operation. LVPECL or CMOS output stages provide multiple low-skew (< 30ps) copies of the input signal to build an efficient clock distribution network. They also function as translators from the input signal standard to LVPECL or CMOS standards. The CF Series operate in an extended temperature range of -55°C to 125°C to meet the demands of higher temperature environments. The CF1xx products require standard external input signal terminations. The CF2xx products have an integrated 50Ω input signal termination with a configurable bias voltage.

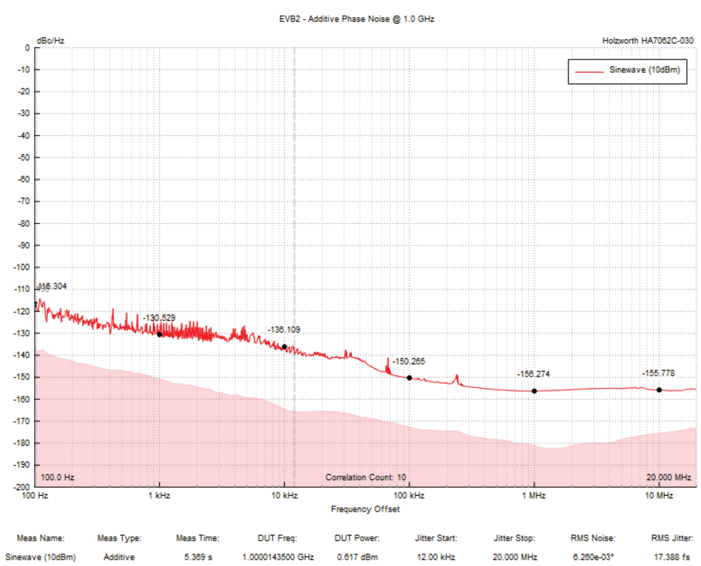
Features

- Input receiver sensitivity of -26dBm
- Input/Output frequency up to 1GHz
- Additive Jitter
  - 20fs @ 1GHz LVPECL
  - 40fs @ 156MHz LVPECL
  - 35fs @ 38.4MHz CMOS
- 30ps output to output skew
- Configurable output divider
- Extended Temp Range: -55°C to 125°C

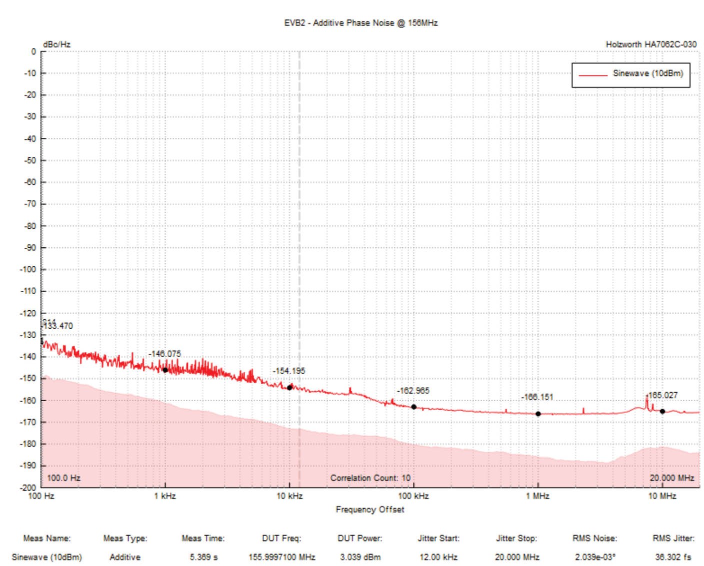
Applications

- 5G/6G clock distribution
- Low jitter clock trees
- Logic translation & signal restoration
- Wired & Wireless communications
- Microprocessor clock distribution
- High speed ADC, DAC clock driver





LVPECL 156MHz Phase Noise Plot



LVPECL 1GHz Phase Noise Plot

Part Number	Inputs Channels	Output Channels	Output Type	Max Output Freq (MHz)	Divide Ratios	Output Skew (ps)	Additive Jitter (fs)	Input Term	Supply Voltage
CF112P	1	2	LVPECL	1000	2,4,8,16,32	30	20 @ 1GHz	No	3.3V
CF124P	2	4	LVPECL	1000	2,4,8,16,32	30	20 @ 1GHz	No	3.3V
CF128P	2	8	LVPECL	1000	2,4,8,16,32	30	20 @ 1GHz	No	3.3V
CF128C	2	8	CMOS	200	2,4,8,16,32		35 @38.4MHz	No	2.5V, 3.3V
CF212P	1	2	LVPECL	1000	2,4,8,16,32	30	20 @ 1GHz	Yes	3.3V
CF218P	1	8	LVPECL	1000	2,4,8,16,32	30	20 @ 1GHz	Yes	3.3V
CF218C	1	8	CMOS	200	2,4,8,16,32		35 @38.4MHz	Yes	2.5V, 3.3V