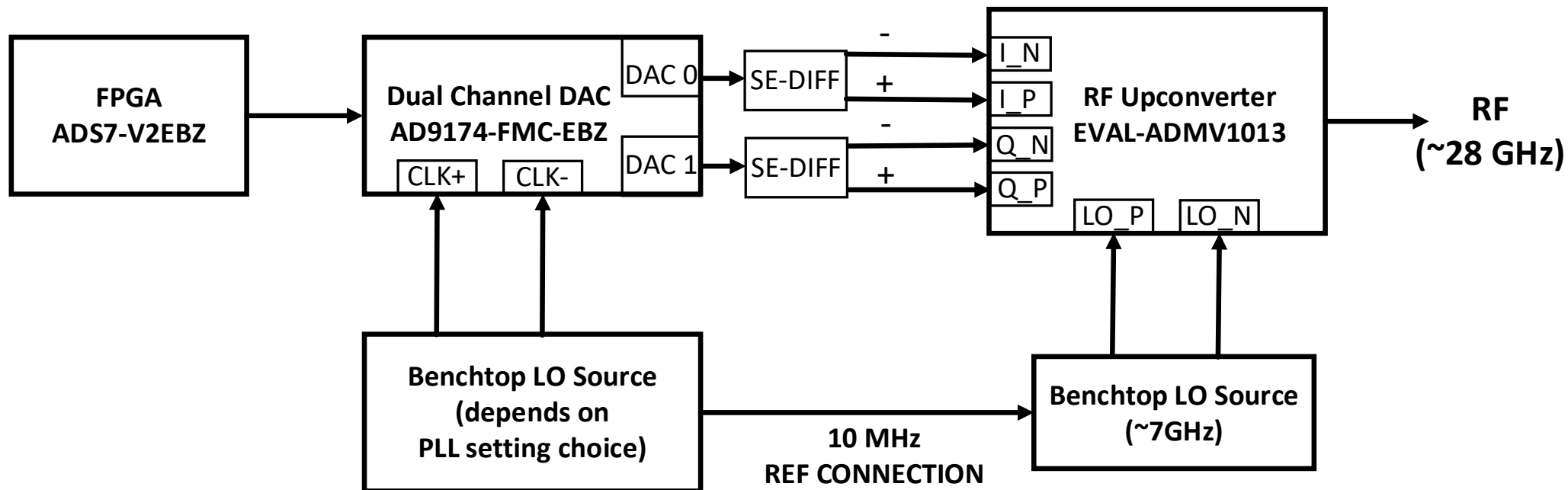


Modulated Source from ADI Components

**Flynn Group
University of Michigan**

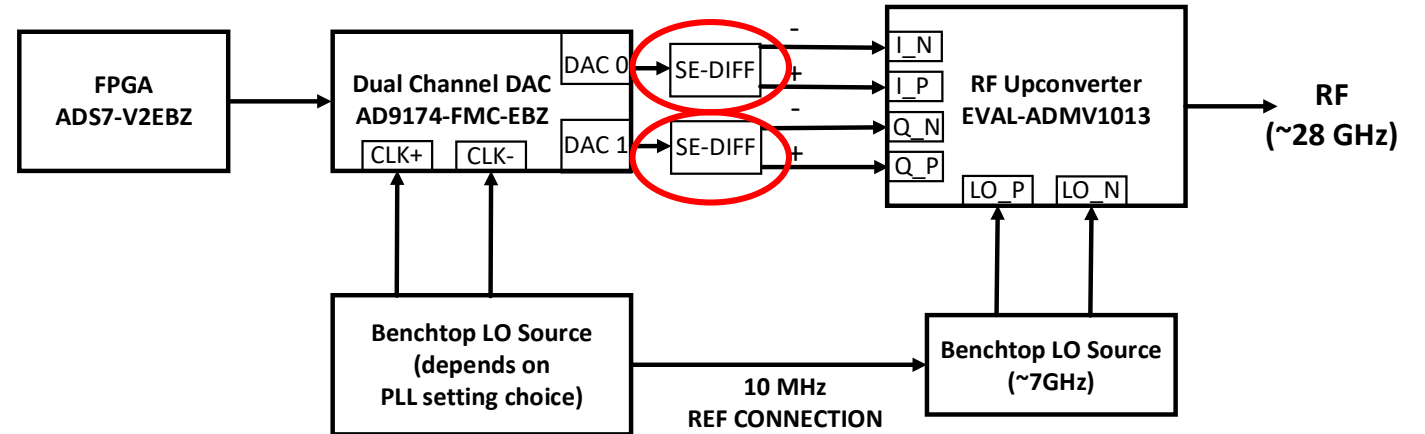


Proposed ADI Components



Modulated Source

- No DAC eval boards with diff outputs
- Eval board for single-ended to differential conversion



TYPICAL APPLICATION

ADC Driver: Single-Ended Input to Differential Output with Common Mode Level Shifting

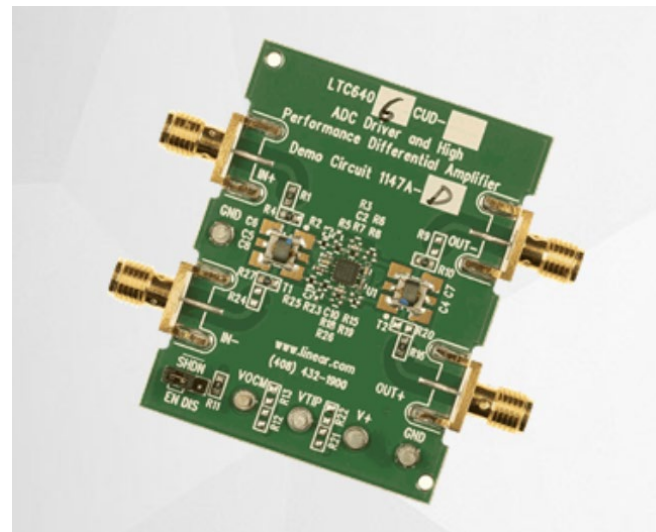
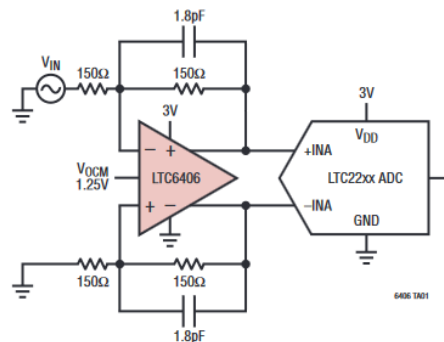


Table 1: DC1147 Board I/O Descriptions

CONNECTOR	FUNCTION
J1 (IN+)	Differential Input. Use this connector to supply an input to the DC1147. Drive from a 50ohm signal source, no external termination necessary.
J2 (OUT-)	Differential Output. Not connected by default. Resistor R9 can be installed and R10 removed to receive the output signal differentially.
J3 (OUT+)	Output. Impedance-matched to 50 ohms, can be used to drive a 50ohm network/spectrum analyzer input.
J4 (IN-)	Differential Input. Not connected by default. Resistor R24 can be installed and R27 removed for differential input drive. R4 and R7 should be matched or both removed to provide a balanced input impedance.
JP1 (SHDN)	Shutdown jumper. The left (EN) position enables the part, while the right (DIS) puts it into shutdown mode.
E3 (VOCM)	Output Common-Mode Adjust. By default, this pin is self-biasing within U1. Override this voltage with any DC voltage source.
E5 (VTIP)	Corresponds to the VTIP pin in DC1147-D (LTC6405/6). Consult the datasheet for pin function. Leave floating if unused. This pin is not connected for all the other parts in the family.

<https://www.analog.com/media/en/technical-documentation/data-sheets/6406fc.pdf>