2GS/s 11b dual I/Q DAC

OVERVIEW

Dual I/Q 11 bits Digital-to-Analogue converters implements in Global Foundries 22FDX/22FDX-PLUS. These converters run with a 2GHz sampling clock deliver output voltages on 100-ohms resistors tied to VDD. It can also be used as a current steering converter, as a current sink. Its compact footprint and low power dissipation make it an excellent choice for SoC design.

KEY FEATURES

- Sampling clock frequency up to 2GHz
- Small area: 126um x 274um
- Power dissipation: 8mW @ 0.8V at 2GHz
- 9.5 bits ENOB typical – SFDR 65dB
- Output voltage range [VDD, VDD–0.2V]
- Output currents sink [0 – 2mA]
- GF 22FDX CMOS technology

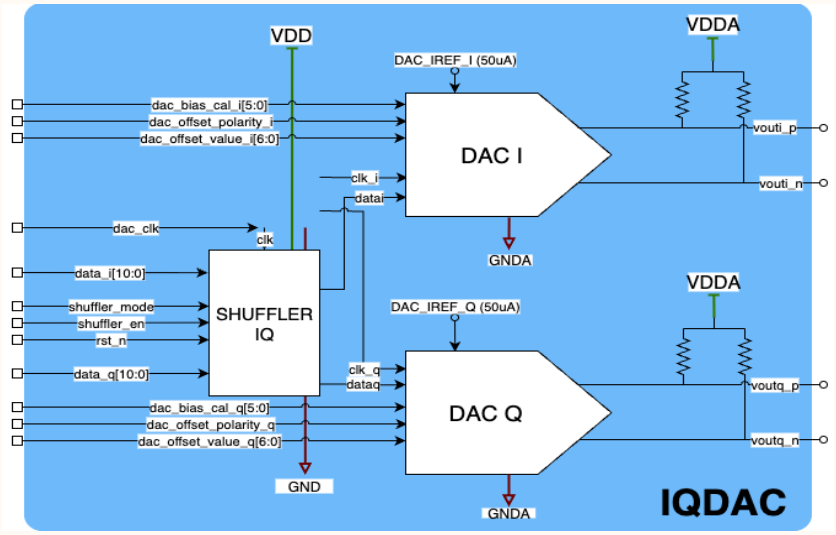
TARGET APPLICATIONS

- Wireless Communications
- Radar Applications
- Satellite Communications
- Wireline Communications

DELIVERABLES

- GDSII layout
- Verilog (or SystemVerilog) model
- Integration support
- DRC, LVS reports
- Datasheet including characterization results
- CDL netlist for LVS
- LEF files
- Verification report

BLOCK DIAGRAM



Contact us at **ip@incirt.de** for more information.