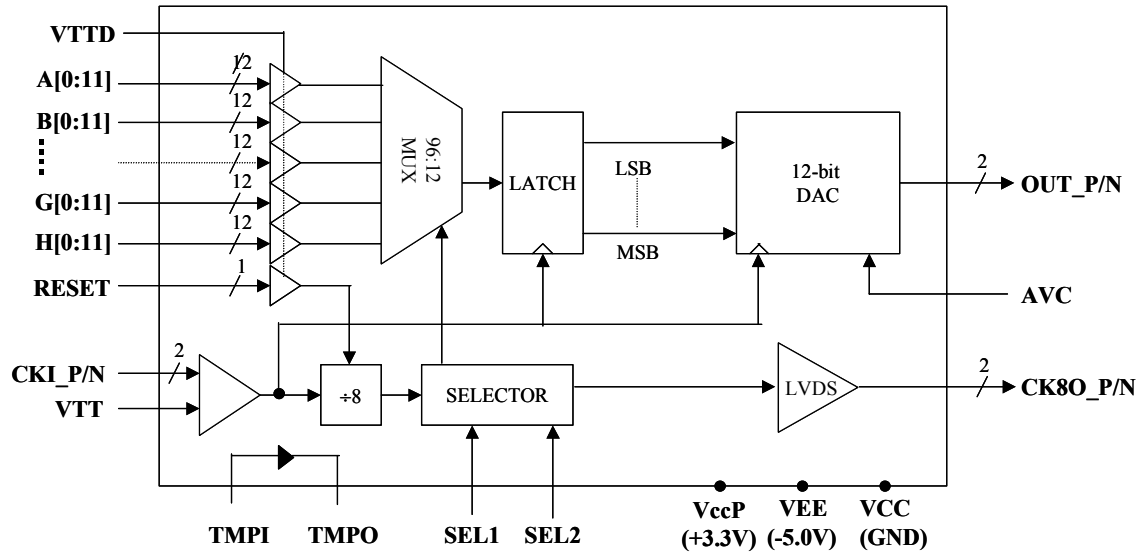


MD681S – High Speed > 4GHz MUXDAC



Key Features

- 12-bit resolution DAC with > 4.0-GSPS rate
- 8:1 multiplexing ratio for each input bit of DAC
- SFDR better than -50 dBc
- Complementary outputs with 50-Ω back terminations
- Complementary divide-by-8 clock LVDS outputs for data synchronization
- Variable 400~800 mV_{pp} single-ended output swing
- Single ended input data and RESET with wide input range
- LQFP 14x14 128L package
- 2.9W power consumption

Applications

- Arbitrary waveform generation
- Radar/Ladar design and testing
- Software defined radio
- Electronic warfare
- Wireless basestations
- RF signal source generation
- Hard disk and magnetic storage testing
- WLAN testing
- Advanced communication modulations

Description

MD681S is a high-speed 12-bit Digital to Analog Converter (DAC) integrated with a 96:12 (12 channels of 8:1) input multiplexer. The converter can be operated at a sampling rate up to at least 4 Gbps. After the 96 single-ended data inputs were multiplexed up to 8 times of speed, the 12 high speed data bits are latched and encoded to drive DAC output stage. To minimize the glitch energy and to achieve high linearity, the DAC is based on a 4-bit segmented with 8-bit R-2R architecture. Complementary outputs are available with 50-Ω output back terminations. Divided-by-8 clock outputs and sampling phase selection (SEL1 and SEL2) are provided to ease the alignment of sampling phase relative to the input data. A RESET function is provided for system applications which need to synchronize the outputs from multiple **MD681S**'s.

Contact us for complete data sheet, evaluation board and price information

Euvis Inc.

685 Cochran Street, Suite 160, Simi Valley, CA 93065

Email: sales@euvis.com Web: www.euvis.com Tel.: (805) 583-9888