MXT2144 14bit 210M SPS DA Converter

MXT2144 MXT2144 MXT2144 MXT2144 Instructions

## 1. Product Features

Excellent spurious-free dynamic range (SFDR) performance

SFDR at Nyquist frequency

83 dBc @5 MHz output frequency

80 dBc @10 MHz output frequency

73 dBc @20 MHz output frequency

The signal-to-noise ratio (SNR) is 77dB (at an output frequency of 5MHz and a sampling rate of 125MSPS)

The data format is two's complement or straight binary

Differential current output: 2 mA to 20 mA

Power consumption: 135 mW @ 3.3 V

Power-down mode power consumption: 15mW @3.3V

On-chip 1.2V reference source

CMOS compatible digital interface

28-pin TSSOP package

Edge-Triggered Latch

## 2. Product Overview

The MXT2144 is a 14-bit precision, high bandwidth, low power DAC chip specifically designed for

The transmit signal path of the communication system is optimized. It provides excellent AC and DC performance and supports the highest

210 MSPS update rate.

The low power consumption of the MXT2144 makes it ideal for portable and low power applications.

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With the full current range output, the power consumption of the MXT2144 can be reduced to 60 mW with only a minor impact on performance.

In addition, in power saving mode, the standby power consumption can be reduced to about 15 mW. The segmented current source structure used

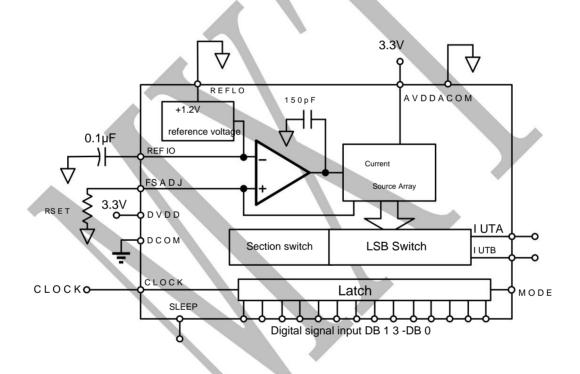
Patented switching technology reduces stray components and improves dynamic performance.

The MXT2144 also integrates edge-triggered input latches and a 1.2 V temperature-compensated bandgap reference.

The digital input supports 3 V CMOS logic

Series.

## 3. Structure diagram



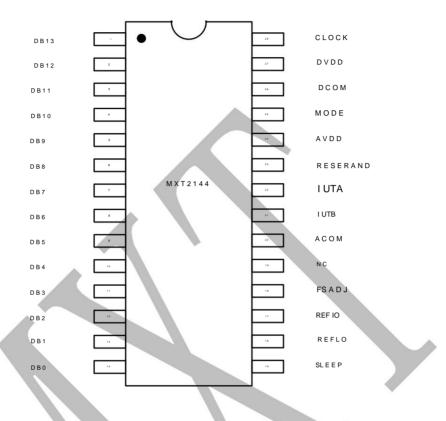
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4. TSSOP28 TSSOP28 TSSOP28 package



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