

DAC 2-CH Interpolation Filter 16-bit 100-Pin TQFP EP Tray

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	TQFP-100
Product Type	Data Conversion ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for AD9779BSVZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The AD9776A/AD9778A/AD9779A are dual, 12-/14-/16-bit, high dynamic range digital-to-analog converters (DACs) that provide a sample rate of 1 GSPS, permitting a multicarrier generation up to the Nyquist frequency. They include features optimized for direct conversion transmission applications, including complex digital modulation and gain and offset compensation. The DAC outputs are optimized to interface seamlessly with analog quadrature modulators such as the ADL537x FMOD series from Analog Devices, Inc. A 3-wire interface provides for programming/readback of many internal parameters. Full-scale output current can be programmed over a range of 10 mA to 30 mA. The devices are manufactured on an advanced 0.18  $\mu\text{m}$  CMOS process and operate on 1.8 V and 3.3 V supplies for a total power consumption of 1.0 W. They are enclosed in a 100-lead thin quad flat package (TQFP).

### Product Highlights

Ultralow noise and intermodulation distortion (IMD) enable high quality synthesis of wideband signals from baseband to high intermediate frequencies.

A proprietary DAC output switching technique enhances dynamic performance.

The current outputs are easily configured for various single-ended or differential circuit topologies.

CMOS data input interface with adjustable setup and hold.

Novel 2 $\times$ , 4 $\times$ , and 8 $\times$  interpolator/coarse complex modulator allows carrier placement anywhere in DAC bandwidth.

## Features

Low power: 1.0 W @ 1 GSPS, 600 mW @ 500 MSPS, full operating conditions

Single carrier W-CDMA

Analog output: adjustable 8.7 mA to 31.7 mA

Novel 2×, 4×, and 8× interpolator/coarse complex modulator allows carrier placement anywhere in DAC bandwidth

Auxiliary DACs allow control of external VGA and offset control

Multiple chip synchronization interface

High performance, low noise PLL clock multiplier

Digital inverse sinc filter

100-lead, exposed paddle TQFP

## Application

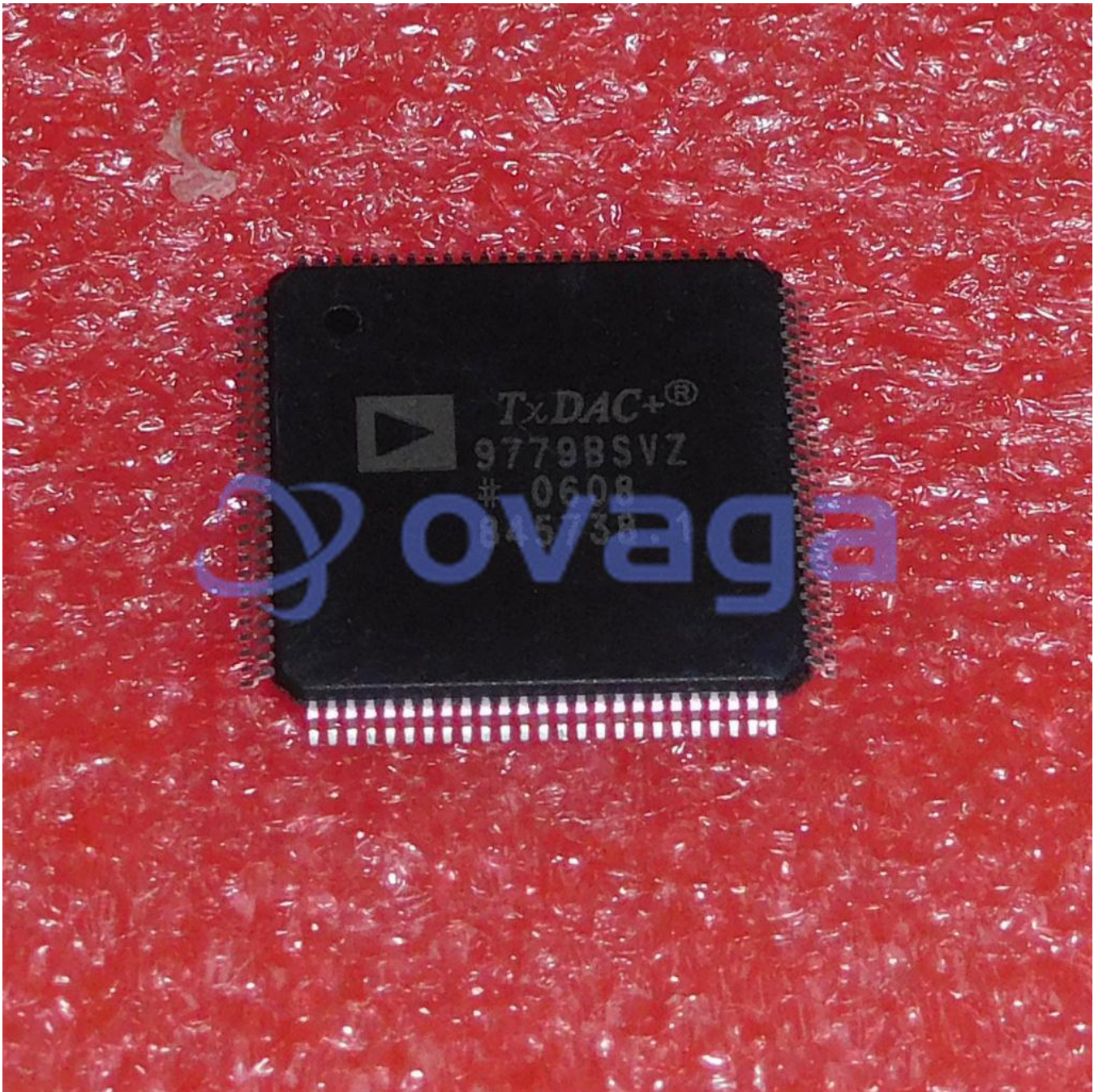
Wireless infrastructure W-CDMA, CDMA2000, TD-SCDMA, WiMax, GSM, LTE

Digital high or low IF synthesis

Internal digital upconversion capability

Transmit diversity

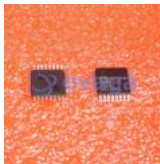
Wideband communications: LMDS/MMDS, point-to-point



### Related Products



[ADAS3022BCPZ](#)  
Analog Devices, Inc  
LFCSP-40



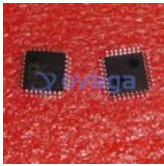
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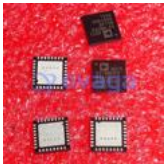
[AD7938BSUZ](#)

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LFCSP-64