

High Performance 10-Bit Display Interface

Manufacturers	Analog Devices, Inc
Package/Case	LQFP-80
Product Type	Audio & Video Products ; Video Decoders
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD9984AKSTZ-170 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD9984A includes a 170 MHz triple ADC with an internal reference, a PLL, and programmable gain, offset, and clamp control. The user provides only a 1.8 V power supply and an analog input. Three-state CMOS outputs can be powered from 1.8 V to 3.3 V.

The AD9984A on-chip PLL generates a sample clock from the tri-level sync (for YPbPr video) or the horizontal sync (for RGB graphics). Sample clock output frequencies range from 10 MHz to 170 MHz. With internal coast generation, the PLL maintains its output frequency in the absence of a sync input. A 32-step sampling clock phase adjustment is provided. Output data, sync, and clock phase relationships are maintained.

The auto-offset feature can be enabled to automatically restore the signal reference levels and calibrate out any offset differences between the three channels. The auto channel-to-channel gain-matching feature can be enabled to minimize any gain mismatches between the three channels.

The AD9984A also offers full sync processing for composite sync and sync-on-green applications. A clamp signal is generated internally or can be provided by the user through the CLAMP input pin.

Fabricated in an advanced CMOS process, the AD9984A is provided in a space-saving, Pb-free, 80-lead low profile quad flat package (LQFP) or 64-lead lead frame chip scale package (LFCSP) and is specified over the 0°C to 70°C temperature range.

Features

10-bit, analog-to-digital converters

170 MSPS maximum conversion rate

Low PLL clock jitter at 170 MSPS

Automatic gain matching

Automated offset adjustment

2:1 input mux

Power-down via dedicated pin or serial register

4:4:4, 4:2:2, and DDR output format modes

Variable output drive strength

Odd/even field detection

External clock input

Regenerated Hsync output

Application

Advanced TVs

Plasma display panels

LCDTV

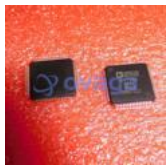
HDTV

RGB graphics processing

LCD monitors and projectors

Scan converters

Related Products



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LQFP-64



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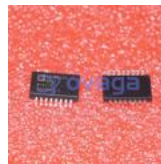
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