



AD9971

GENERAL DESCRIPTION

The [AD9971](#) is a highly integrated CCD signal processor for high speed digital video camera applications. Specified at pixel rates of up to 50 MHz, the [AD9971](#) consists of a complete analog front end with analog-to-digital conversion combined with a programmable timing driver. The *Precision Timing™* core allows adjustment of high speed clocks with 310 ps resolution at 50 MHz operation. The [AD9971](#) also contains a reduced range LVDS interface for the data outputs.

The analog front end includes black level clamping, CDS, VGA, and a 50 MSPS, 12-bit ADC. The timing driver provides the high speed CCD clock drivers for RG, HL, and H1 to H4. Operation is programmed using a 3-wire serial interface.

Packaged in a space-saving 6 mm × 6 mm, 40-lead LFCSP_VQ, the [AD9971](#) is specified over an operating temperature range of -25°C to +85°C.

Digital video camcorders
Professional/high end digital cameras
Broadcast cameras
Industrial high speed cameras
High speed data acquisition systems

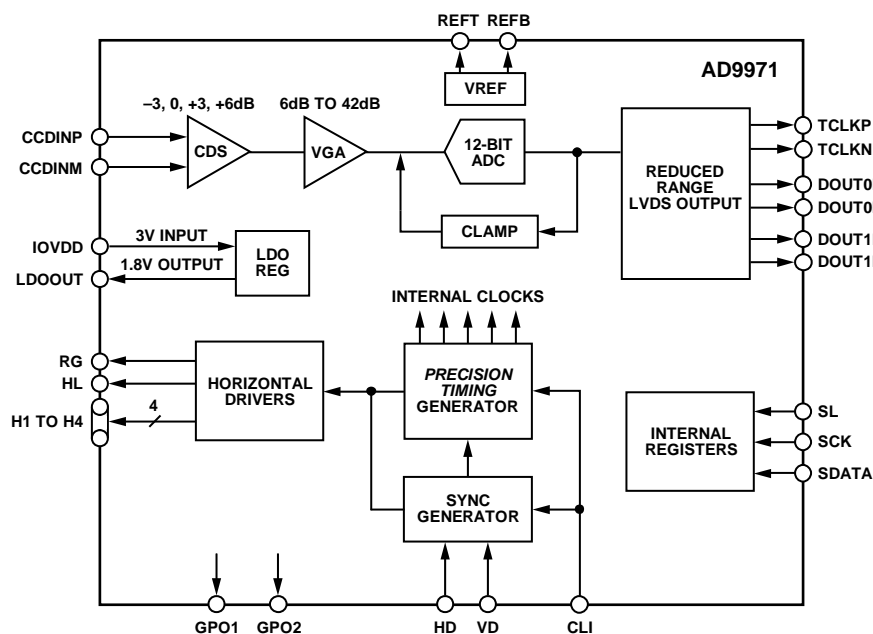


Figure 1.

Rev. SpB **Document Feedback**
 Information furnished by Analog Devices is believed to be accurate and reliable. However, no responsibility is assumed by Analog Devices for its use, nor for any infringements of patents or other rights of third parties that may result from its use. Specifications subject to change without notice. No license is granted by implication or otherwise under any patent or patent rights of Analog Devices. Trademarks and registered trademarks are the property of their respective owners.

One Technology Way, P.O. Box 9106, Norwood, MA 02062-9106, U.S.A.
Tel: 781.329.4700 ©2006–2014 Analog Devices, Inc. All rights reserved.
Technical Support www.analog.com

NOTES