

AD9977: Dual-Channel, 14-Bit CCD Signal Processor with *Precision Timing*[™] Core

PRODUCT DESCRIPTION

The AD9977 is a highly integrated dual channel CCD signal processor for high speed digital video camera applications. Each channel is specified at pixel rates of up to 65 MHz, and consists of a complete analog front end with A/D conversion combined with a programmable timing driver. The *Precision Timing* core allows adjustment of high speed clocks with 240 ps resolution at 65 MHz operation. The AD9977 also contains a reduced range LVDS interface for the dual-channel data outputs.

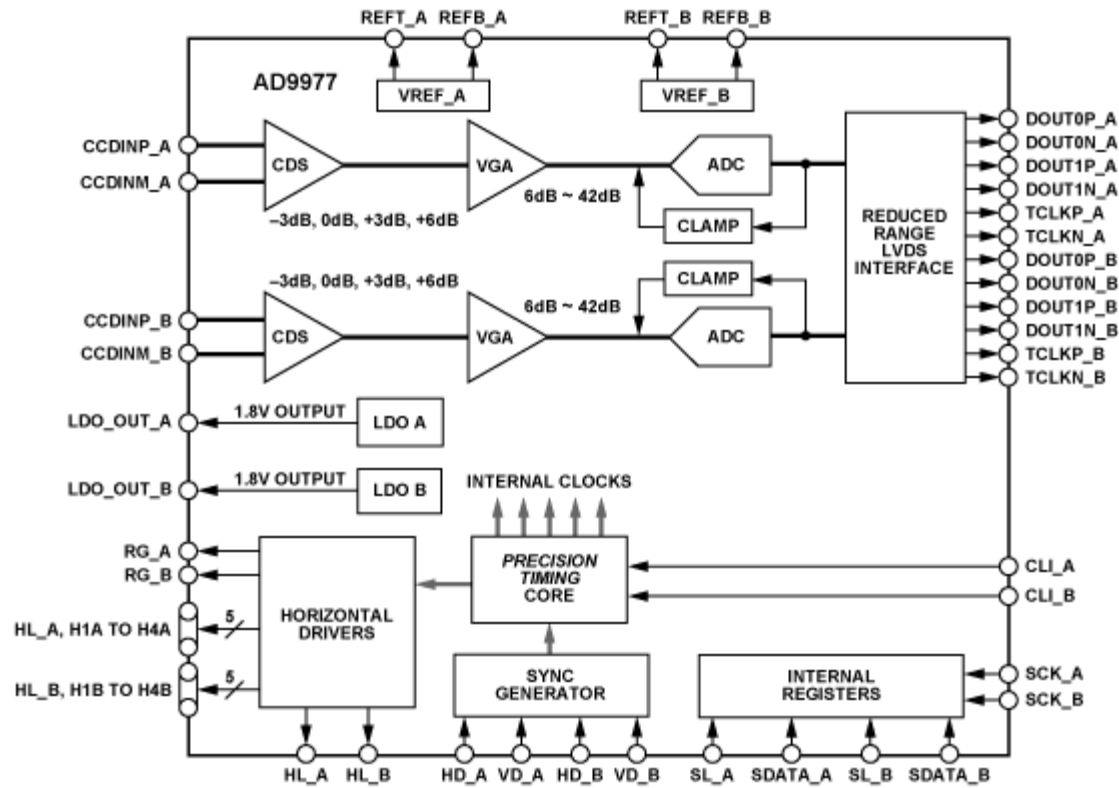
Each analog front end includes black level clamping, CDS, VGA, and a 65 MSPS, 14-bit A/D converter. The timing driver provides the high speed CCD clock drivers for RG, HL, and H1 to H4. Operation is programmed using a 3-wire serial interface.

Packaged in a space-saving 6 mm × 6 mm, 84-ball CSP_BGA package, the AD9977 is specified over an operating temperature range of -25°C to +85°C.

Applications

- Professional HDTV camcorders
- Professional, high-end digital cameras
- Broadcast cameras
- Industrial high speed cameras

Functional Block Diagram for AD9977
Dual-Channel, 14-Bit CCD Signal Processor with *Precision Timing*™ Core



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