VCA2614

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Dual, VARIABLE GAIN AMPLIFIER with Input Buffer

FEATURES

- LOW NOISE VCA: 3.7nV/√Hz
- GAIN RANGE: 24dB to 45dB
- 40MHz BANDWIDTH
- ACCEPTS DIFFERENTIAL INPUT/OUTPUT
- LOW CROSSTALK: 52dB at Max Gain, 5MHz
- HIGH-SPEED VARIABLE GAIN ADJUST
- POWER SHUTDOWN MODE
- HIGH IMPEDANCE INPUT BUFFER

APPLICATIONS

- ULTRASOUND SYSTEMS
- GAMMA CAMERAS
- WIRELESS RECEIVERS
- TEST EQUIPMENT

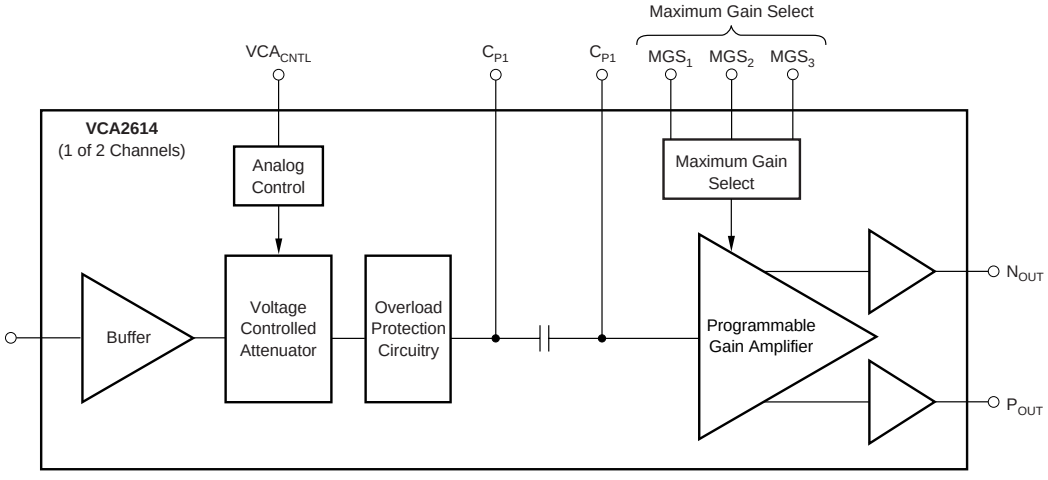
DESCRIPTION

The VCA2614 is a highly integrated, dual receive channel, Variable Gain Amplifier (VGA) with independant gain control.

The VCA2614's VGA section consists of two parts: the Voltage Controlled Attenuator (VCA) and the Programmable Gain Amplifier (PGA). The gain and gain range of the PGA can be digitally programmed. The combination of these two programmable elements results in a variable gain ranging from 0dB up to a maximum gain as defined by the user through external connections. The input buffer allows for either single-ended or differential operation. The output of the VGA can be used in either a single-ended or differential mode to drive high performance analog-to-digital converters. In addition, when the control voltage is < 50mV, the amplifier is powered down.

The VCA2614 also features low crosstalk and outstanding distortion performance. The combination of low noise, and gain range programmability make the VCA2614 a versatile building block in a number of applications where noise performance is critical. The VCA2614 is available in a TQFP-32 package.

PRODUCT PREVIEW



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