MOSCAD

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VGA128T Variable Gain Amplifier

FEATURES

- Gain programmable in 6dB steps from -6dB to 42dB
- Differential Input Differential Output
- Total Harmonic Distortion better than 70dB
- Power Down Mode
- Signal Bandwidth up to 0.5MHz
- Input referred noise < 15uV_{RMS} @max. gain

APPLICATIONS

- General-puropse Digitally controlled Variable Gain Block.

TECHNOLOGY: 0.18u CMOS Technology

OVERVIEW

The VGA128T is a switched-capacitor, fully differential amplifier with digitally controlled variable gain amplifier.

The Gain of the VGA128T can be set digitally in the range from -6dB to 42dB with an accuracy of +/- 1dB, by steps of 6dB

The VGA128T has a power down modus in which the current consumption is less than 1uA.

FUNCTIONAL BLOCK DIAGRAM

