



Description

The AK9240NK is a 12-bit 2-channel 1MHz full differential input ADC with a band limiting filter and a programmable gain amplifier (PGA). It supports both current and voltage inputs. In addition, the AK9240 even integrates an LED driver and an automatic power controlling circuits while it is housed in a small 3mm x 3mm QFN package. This device exerts a great effect on downsizing and boosting performance of optical encoders.

Key Features

1. 2ch 12bit SAR ADC
2. Sampling Rate : 1MSPS
3. full-differential input
4. current / voltage input
5. band limiting filter
6. PGA
7. LED driver
8. Auto power control circuit蔵
9. SPI serial I/F
10. S/(N+D): 71dB at 10kHz input
11. INL: ± 1.25 LSB(max)
12. DNL: ± 1.0 LSB(max)
13. Power Supply : 2.7V to 5.5V
14. Operation temperature : -40°C to 105°C
15. Package : 20pin QFN (3mm X 3mm)

Block Diagram

