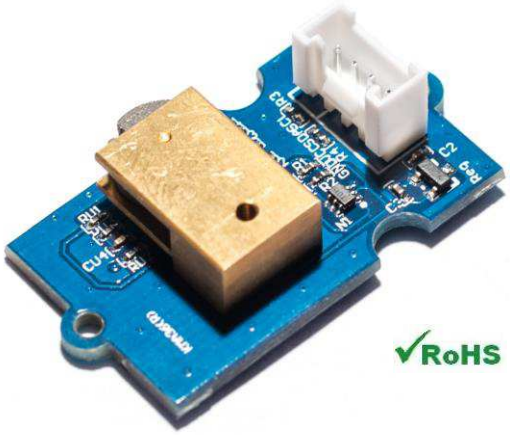


KMA36 SENSOR FOR GROVE SYSTEM

Digital Magnetic Encoder IC

TE Connectivity provides the necessary hardware to interface the KMA36, a digital magnetic encoder IC for precise rotational measurement. To any system that utilizes Grove compatible expansion ports configurable for I²C communication. The KMA36 sensor feature a system-on chip technology that combines a magneto resistive element along with analog to digital converter and signal processing in a standard small package. The sensor model works in 5V voltage external. By using Anisotropic Magneto Resistive(AMR) technology, the KMA36 can determine contactless the magnetic angle of an external magnet over 360°.

Specifications

- Contactless angle measurement from 0° to 360°
- Programmable resolution up to 15 bits
- I²C communication
- Very low hysteresis
- Incremental model
- Programmable zero position
- low power consumption

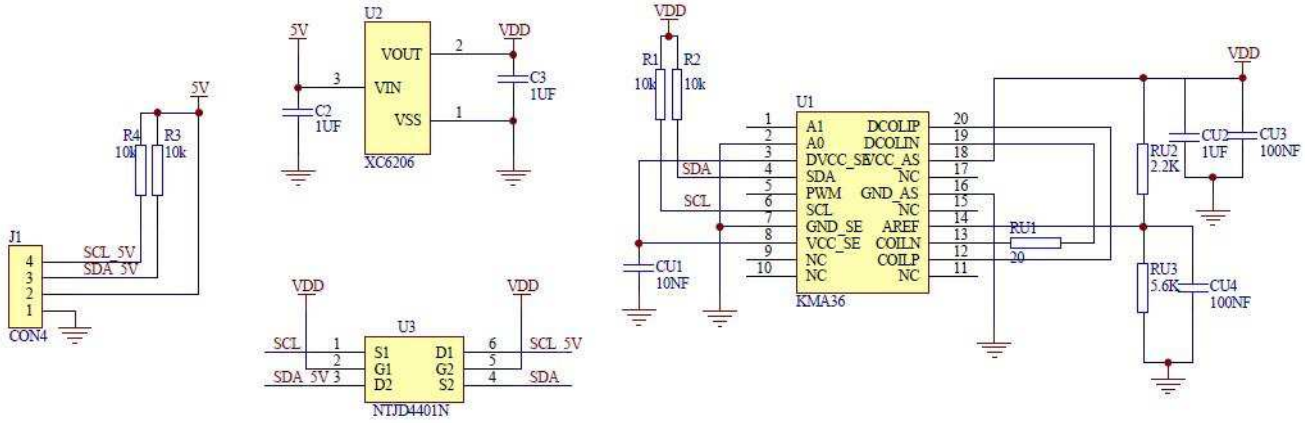
Features

- 4-pin Grove compatible connector
- I²C interface
- Programmable resolution up to 15 bits
- Very low hysteresis
- High accuracy mode

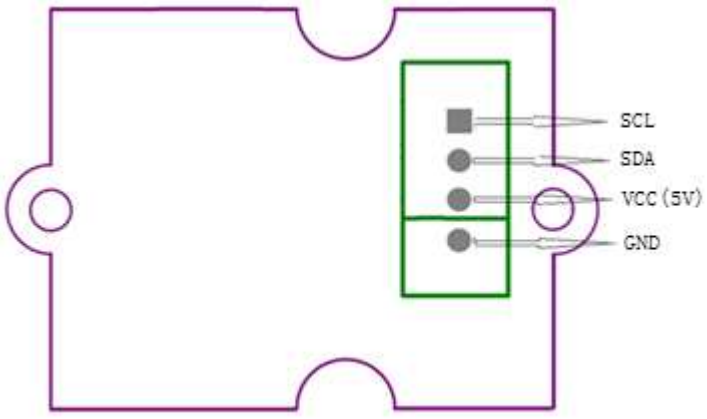
Performance

- User programmable parameters
- Low power mode
- -40°C to 125°C accuracy:1°C
- Sleep and automatic wake-up through I²C
- Programmable zero position
- Device address hardware configurable
- Operates 5V

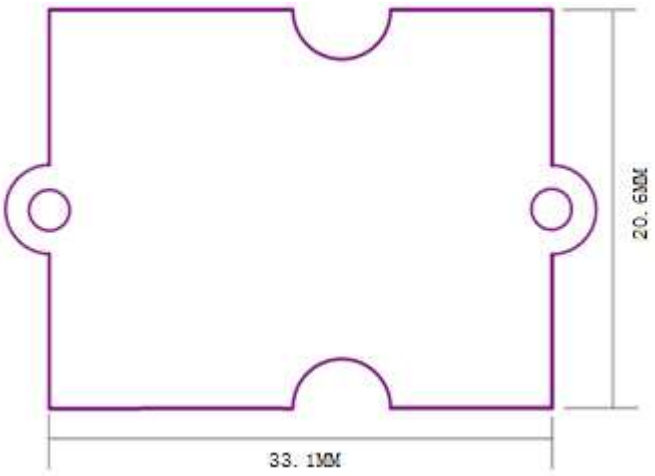
Schematic



Connector Pin Assignments (I²C Communications)



Dimensions (mm)


20.6MM
33.1MM