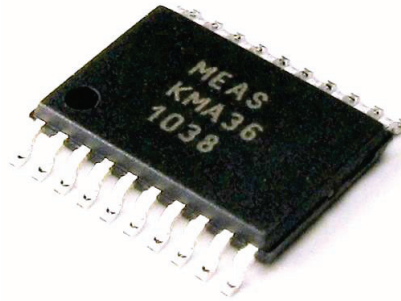


KMA36 System-on-Chip For Rotational or Linear Position Measurement



Measurement Specialties, Inc. (NASDAQ: MEAS) is now releasing its [KMA36](#) universal magnetic encoder to full production. This system-on-chip combines a magnetoresistive sensor array along with an analog-to-digital converter and signal processing in a standard small TSSOP package. This MEAS technology platform is well suited for adaptation to customer needs in various applications such as potentiometer replacement, motor feedback control, gauge readings, precise linear displacement measurements or steering wheel measurements.

This contactless sensor uses Anisotropic Magneto Resistive (AMR) technology to measure the magnetic field angle of an external magnet over a rotation of 360° as well as incremental positions along a linear magnetic pole strip with a 5mm pole length. Configuration, data communication (I²C), and an analog signal output are easily accessible via TSSOP pins. The software includes a self diagnostic sequence at power on which allows testing the electronic circuit before it is integrated into the assembly and during field use. It also performs monitoring functions to signal faults and failures to the system it interfaces with. The device can be set to low power mode using sleep modes and power down of the sensor.

The KMA36 was designed to replace the less precise Hall-Effect position sensors that are susceptible to external noise. It can also replace more fragile optical encoders whose bearings are often subject to failure. These devices will also be the sensor of choice for low-power applications. The KMA36 features a sleep and low power mode with automatic wake-up in I²C mode. Position data can also be transmitted using a PWM or two-wire (SDA, SCL) communication bus.

Primary applications for this sensor are harsh industrial uses, engine & vehicle environments, control of handling machines, machine tools, robotics and motor motion. The KMA36 can withstand dust, temperature changes, dirt and similar contaminants. This sensor may also be used in selected medical, laboratory and conveyor instrumentation.

Measurement Specialties, Inc. designs and manufactures sensors and sensor-based systems. The company produces a wide variety of sensors and transducers to measure precise ranges of physical characteristics such as pressure, force, vibration, torque, position, temperature, humidity, fluid properties, mass air flow and photo optics. Measurement Specialties uses multiple advanced technologies – including piezo-resistive, electro-optic, electro-magnetic, variable reluctance, magneto resistive, digital encoders, thermistors, thermocouples, RTDs, capacitive, resonant beam, application specific integrated circuits (ASICs), micro-electromechanical systems (MEMS), piezoelectric polymers and strain gauges to engineer sensors that operate accurately and cost-effectively in customers' applications.

For more information about Measurement Specialties and our products, email sensors.help@meas-spec.com or visit us at www.meas-spec.com.