AX24C02A/04A/08A/16A

AXElite 亞瑟萊特科技股份有限公司 | AXElite Technology Co., Ltd.
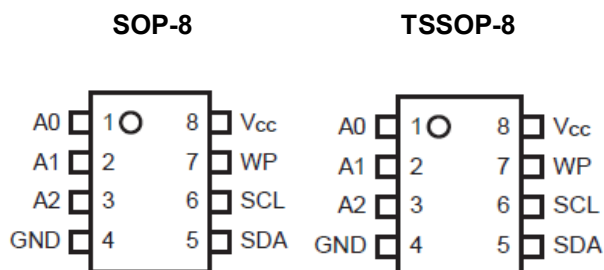Powered By Innovation

2K/4K/8K/16K-bit 2-WIRE SERIAL CMOS EEPROM

GENERAL DESCRIPTIO

The AX24C02A/04A/08A/16A provides 2048/4096/8192/16384 bits of serial electrically erasable and programmable read-only memory (EEPROM) organized as 256/512/1024/2048 words of 8 bits each. The device is optimized for use in many industrial and commercial applications where low-power and low-voltage operation are essential. The AX24C02A/04A/08A/16A is available in space-saving SOP-8, TSSOP-8, DFN-8 and SOT23-5 packages and is accessed via a two-wire serial interface.
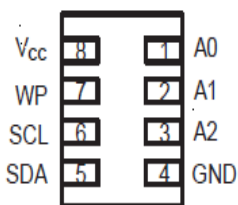
FEATURES

- Wide Voltage Operation
  - V_{CC} = 1.8V to 5.5V
- Operating Ambient Temperature: -40°C to +85°C
- Internally Organized:
  - AX24C02A, 256 X 8 (2K bits)
  - AX24C04A, 512 X 8 (4K bits)
  - AX24C08A, 1024 X 8 (8K bits)
  - AX24C16A, 2048 X 8 (16K bits)

- Two-wire Serial Interface
- Schmitt Trigger, Filtered Inputs for Noise Suppression
- Bidirectional Data Transfer Protocol
- 1 MHz (5V), 400 kHz (1.8V, 2.5V, 2.7V) Compatibility
- Write Protect Pin for Hardware Data Protection
- 8-byte Page (2K), 16-byte Page (4K, 8K,16K) Write Modes
- Partial Page Writes Allowed
- Self-timed Write Cycle (5 ms max)
- High-reliability
  - Endurance: 1 Million Write Cycles
  - Data Retention: 100 Years
- SOP-8, TSSOP-8, DFN-8 and SOT23-5 packages
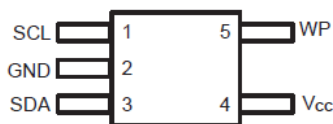
PIN ASSIGNMENT (Top-View)

SOP-8

TSSOP-8

TDFN-8

Bottom view

SOT23-5

PIN CONFIGURATION

Pin Name	Functions
A0 - A2	Address Inputs
SDA	Serial Data
SCL	Serial Clock Input
WP	Write Protect
GND	Ground
Vcc	Power Supply