AT24C04C/AT24C08C

I²C-Compatible (Two-Wire) Serial EEPROM
4-Kbit (512 x 8), 8-Kbit (1,024 x 8)

Features

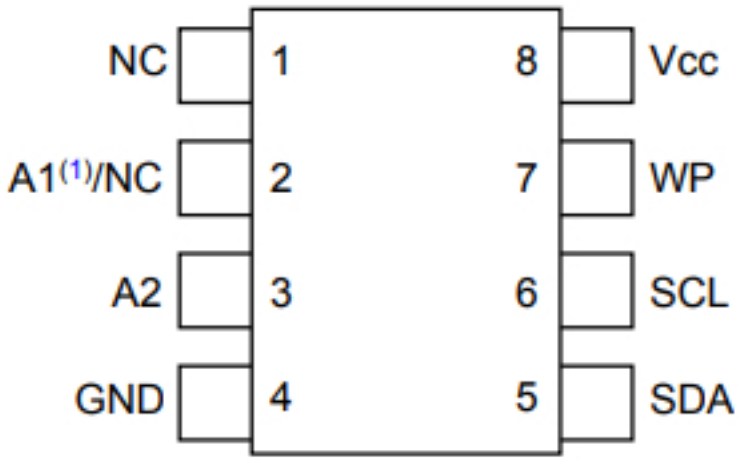
- Low-Voltage Operation:
  - V_{CC} = 1.7V to 5.5V
- Internally Organized as 512 x 8 (4K) or 1,024 x 8 (8K)
- Industrial Temperature Range: -40°C to +85°C
- I²C-Compatible (Two-Wire) Serial Interface:
  - 100 kHz Standard mode, 1.7V to 5.5V
  - 400 kHz Fast mode, 1.7V to 5.5V
  - 1 MHz Fast Mode Plus (FM+), 2.5V to 5.5V
- Schmitt Triggers, Filtered Inputs for Noise Suppression
- Bidirectional Data Transfer Protocol
- Write-Protect Pin for Full Array Hardware Data Protection
- Ultra Low Active Current (3 mA maximum) and Standby Current (6 µA maximum)
- 16-byte Page Write Mode:
  - Partial page writes allowed
- Random and Sequential Read Modes
- Self-Timed Write Cycle within 5 ms Maximum
- ESD Protection > 4,000V
- High Reliability:
  - Endurance: 1,000,000 write cycles
  - Data retention: 100 years
- Green Package Options (Lead-free/Halide-free/RoHS compliant)
- Die Sale Options: Wafer Form and Tape and Reel Available

Packages

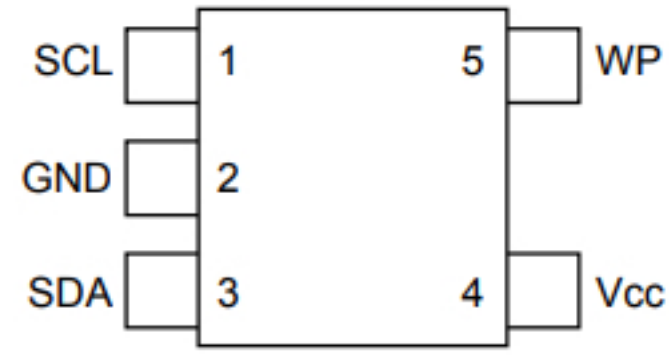
- 8-Lead PDIP, 8-Lead SOIC, 5-Lead SOT23, 8-Lead TSSOP, 8-Pad UDFN and 8-Ball VFBGA

1. Package Types (not to scale)

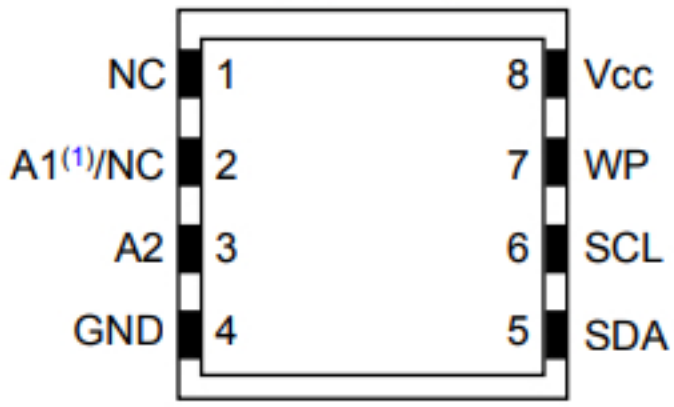
8-lead PDIP/SOIC/TSSOP
(Top View)



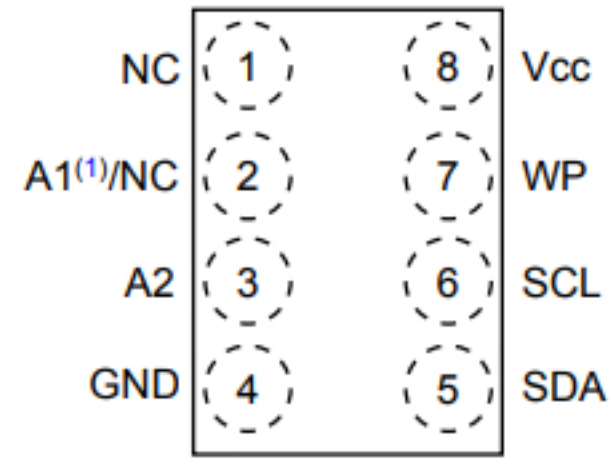
5-lead SOT23(2)
(Top View)



8-pad UDFN
(Top View)



8-ball VFBGA
(Top View)



Note:

1. This pin is device address input (A1) pin on the AT24C04C and is a NC or no connect on the AT24C08C. Refer to Pin Descriptions for additional details.
2. Refer to Device Addressing for details about addressing the SOT23 version of the device.