ACE25AC64S

SPI Serial EEPROM

Description

The ACE25AC64S is 65536 bits of serial Electrical Erasable and Programmable Read Only Memory, commonly known as EEPROM. They are organized as 8192 words of 8 bits (1 byte) each. The devices are fabricated with proprietary advanced CMOS process for low power and low voltage applications. These devices are available in standard 8-lead DIP, 8-lead SOP, 8-lead TSSOP and 8-lead UDFN packages. The memory is accessed via a simple Serial Peripheral Interface (SPI) compatible serial bus. The $\overline{\text{HOLD}}$ pin may be used to suspend any serial communication without resetting the serial sequence. While the device is paused, transitions on its inputs will be ignored. Our extended VCC range (1.8V to 5.5V) devices enables wide spectrum of applications.

Features

- Serial Peripheral Interface (SPI) Compatible
- Supports SPI Modes 0 (0,0) and 3 (1,1)
  Data Sheet Describes Mode 0 Operation
- Low voltage and low power operations
  ACE25AC64S: V_{CC} = 1.8V to 5.5V
- 20MHz clock rate (5V)
- Partial page write operation allowed (32 bytes page write mode).
- Self-timed programming cycle (5ms max).
- Block Write Protection (Protect 1/4, 1/2, or Entire Array).
- Write protect pin for hardware data protection.
- High reliability: typically 1,000,000 cycles endurance.
- 100 years data retention.
- Industrial temperature range (-40℃ to 85℃).
- Standard 8-pin DIP/SOP/TSSOP/UDFN Pb-free packages

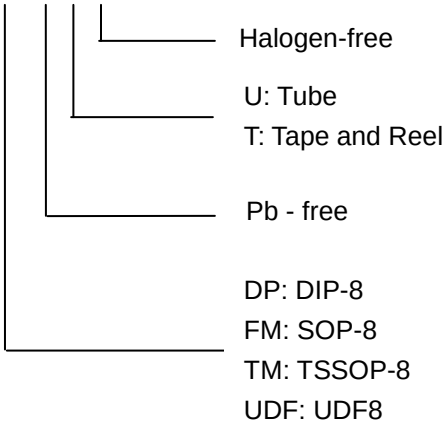
Absolute Maximum Ratings

Industrial operating temperature	-40℃ to 85℃
Storage temperature	-50℃ to 125℃
Input voltage on any pin relative to ground	-0.3V to V_{CC} + 0.3V
Maximum voltage	8V
ESD Protection on all pins	>2000V

Notice: Stresses exceed those listed under “Absolute Maximum Rating” may cause permanent damage to the device. Functional operation of the device at conditions beyond those listed in the specification is not guaranteed. Prolonged exposure to extreme conditions may affect device reliability or functionality.

Ordering information

ACE25AC64S XX + X H



Notes

ACE does not assume any responsibility for use as critical components in life support devices or systems without the express written approval of the president and general counsel of ACE Technology Co., LTD. As sued herein:

1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and shoes failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury to the user.
2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.