



# ACEH25D100G

## 1M BIT SPI NOR FLASH

### Description

The ACEH25D100G is 1M-bit Serial Peripheral Interface (SPI) Flash memory, and supports the Dual SPI: Serial Clock, Chip Select, Serial Data I/O0 (SI), I/O1 (SO). The Dual Output data is transferred with speed of 108Mbps/s. The device uses a single low voltage power supply, ranging from 2.7 Volt to 3.6 Volt. Additionally, the device supports JEDEC standard manufacturer and device ID. In order to meet environmental requirements, offers an 8-pad USON 3x2-mm packages.

### Features

- Serial Peripheral Interface (SPI)
  - Standard SPI: SCLK, /CS, SI, SO, /WP
  - Dual SPI: SCLK, /CS, IO0, IO1, /WP
- Read
  - Normal Read (Serial): 55MHz clock rate
  - Fast Read (Serial): 108MHz clock rate
  - Dual Read: 108MHz clock rate
- Program
  - Serial-input Page Program up to 256bytes
- Erase
  - Block erases (64/32 KB)
  - Sector erases (4 KB)
  - Chip erase
- Program/Erase Speed
  - Page Program time: 0.7ms typical
  - Sector Erase time: 100ms typical
  - Block Erase time: 0.3/0.5s typical
  - Chip Erase time: 8s typical
- Flexible Architecture
  - Sector of 4K-byte
  - Block of 32/64K-byte
- Low Power Consumption
  - 20mA maximum active current
  - 5uA maximum power down current
- Software/Hardware Write Protection
  - Enable/Disable protection with WP Pin
  - Write protect all/portion of memory via software
  - Top or Bottom, Sector or Block selection



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- **Single Supply Voltage**  
Full voltage range: 2.7~3.6V
- **Temperature Range**  
Industrial (-40°C to +85°C)
- **Cycling Endurance/Data Retention**  
Typical 100k Program-Erase cycles on any sector  
Typical 20-year data retention at 55°C



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### **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 whose 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.

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