



K24C128D

I²C-Compatible Serial E²PROM

Data Sheet Rev.1.2

General Description

The K24C128D is 128-Kbit I²C-compatible Serial EEPROM (Electrically Erasable Programmable Memory) device. It contains a memory array of 16384 × 8bits, which is 64-byte per page. K24C128D provides the following devices for different application.

Device Selection Table

Device Name	Supply	Temp. Range	Max. Clock Frequency
K24C128D -MI	1.7V~5.5V	-40°C ~ 85°C	1MHz ^[1]
K24C128D -NK	1.8V~5.5V	-40°C~105°C	1MHz ^[1]
K24C128D-DE	2.5V~5.5V	-40°C~125°C	1MHz

Note 1: 400 kHz for V_{CC} < 2.5V.

Features

- Single Supply Voltage and High Speed
 - ◇ Minimum operating voltage down to 1.7V
 - ◇ 1 MHz clock from 2.5V to 5.5V
 - ◇ 400kHz clock from 1.7V to 2.5V
- Low power CMOS technology
 - ◇ Read current 400uA, maximum
 - ◇ Write current 1.6mA, maximum
- Schmitt Trigger, Filtered Inputs for Noise Suppression
- Sequential & Random Read Features
- Page Write Modes, Partial Page Writes Allowed
- Write protection of the whole memory array
- Additional Write Lockable Page and 128-bit Serial Number
- Self-timed Write Cycle (5ms maximum)
- High Reliability
 - ◇ Endurance: > 1 Million Write Cycles
 - ◇ Data Retention: > 100 Years
 - ◇ ESD Protection (HBM): > 6KV
 - ◇ Latch up Capability: +/- 200mA (25°C and 125°C)
- Package: PDIP-8, SOP-8, TSSOP-8, DFN-8/UDFN-8, SOT23-5, TSOT23-5

1. Pin Configuration

1.1 Pin Configuration

Figure 1-1 Pin Configuration

