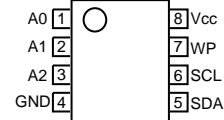


# BR24L32-W/F-W/FJ-W/FV-W BR24L64-W/F-W

## Features

- 32k bit serial EEPROM organized as  $4k \times 8\text{bit}$  (BR24L32)  
64k bit serial EEPROM organized as  $8k \times 8\text{bit}$  (BR24L64)
- 2 wire bus serial interface (2 byte Address)
- Low operating voltage range (2V operating)  
Read : 1.8~5.5V  
Write : 1.8~5.5V
- Low current consumption  
Active : 3mA MAX  
Standby : 2μA MAX
- Clock frequency : 100kHz MAX (1.8~5.5V)  
400kHz MAX (2.5~5.5V)
- Write cycle time : 5ms MAX
- Address auto-increment function during read operation
- Automatic erase-before-write function during write operation
- Page write function : 32byte
- Inadvertent write protection function  
Inadvertent write protection at low voltage (Vcc Lock-out function)  
WP (Write Protect) function
- Schmitt trigger circuit and noise filter are built into SCL and SDA pins
- 1,000,000 write cycle typical
- 40 years data retention
- Operating temperature range : -40~85°C

## Pin Configurations



DIP8/SOP8/SOP-J8\*/SSOP-B8

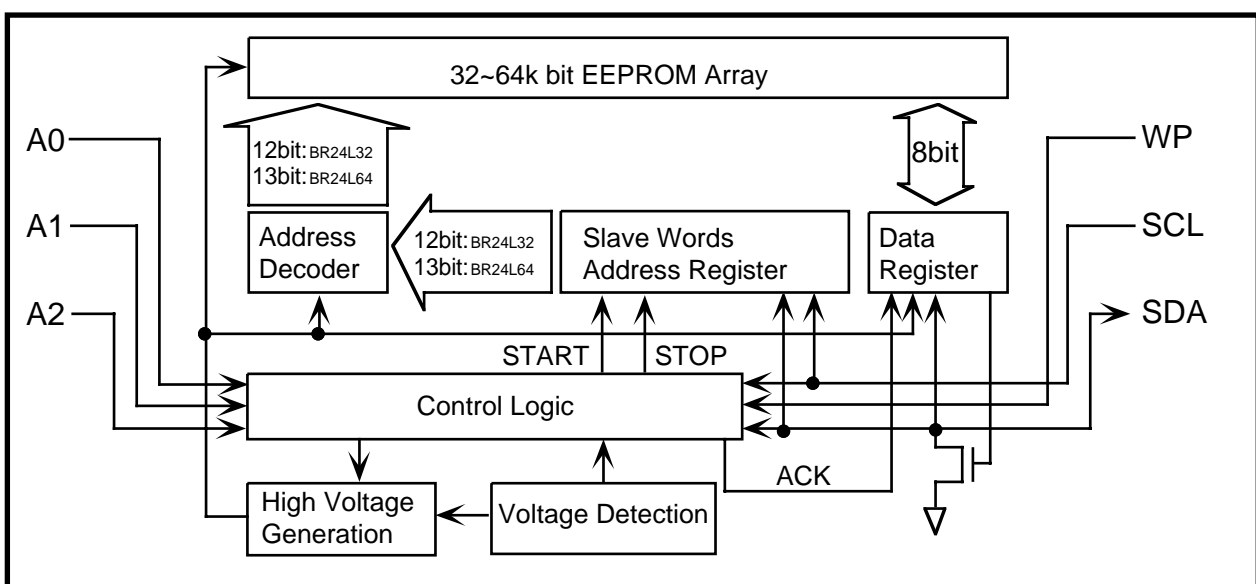
DIP8/SOP8 (Only BR24L64)

## Pin Functions

Pin Names	Functions
A0, A1, A2	Slave Address Inputs
GND	Ground
SDA	Serial Data Input/Output
SCL	Serial Data Clock
WP	Write Protect
Vcc	Power Supply

\* Under development

## Block Diagram



ROHM EEPROM  
1.8V Low voltage  
operating

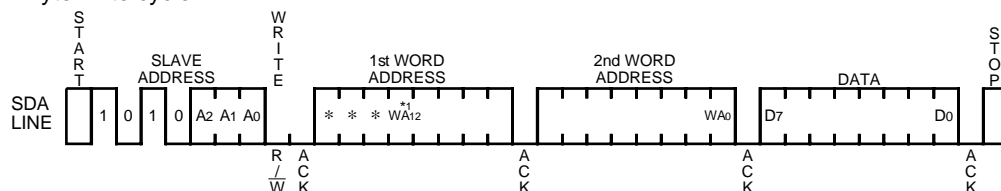
ROHM EEPROM  
1,000,000  
Write cycle

ROHM EEPROM  
Double Cell

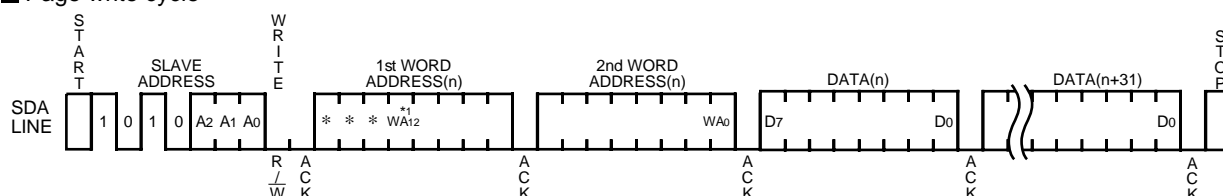
## Serial 2 Wire Interface (I<sup>2</sup>C BUS Type)

### Timing chart

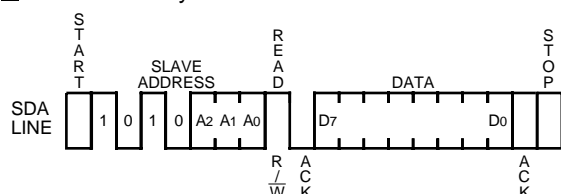
#### ■ Byte write cycle



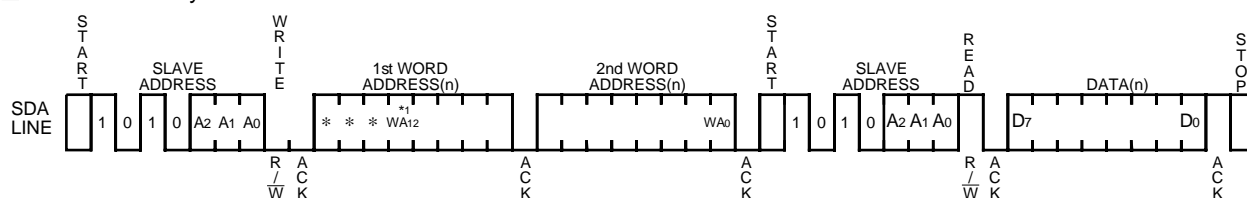
#### ■ Page write cycle



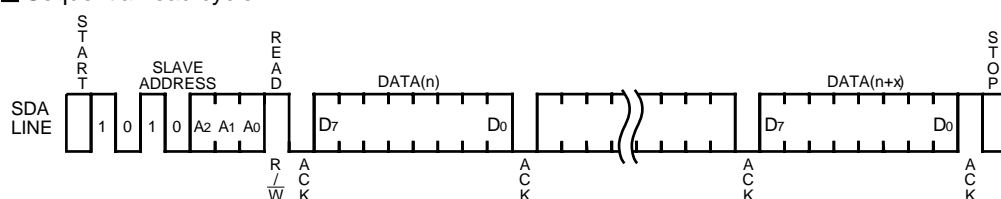
#### ■ Current read cycle



#### ■ Random read cycle



#### ■ Sequential read cycle



\*1: WA<sub>12</sub>...Don't Care (BR24L32)

Note : BR24C32/F has no letter "-W", but it is a double-cell type.

BR24C64/F is a single-cell type.

Please be careful not to confuse w-cell type and single-cell type. ("-W" means double-cell type.)