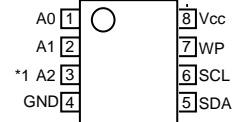


# BR24L08-W/F-W/FJ-W/FV-W/FVM-W BR24L16-W/F-W/FJ-W/FV-W/FVM-W

## Features

- 8k bit serial EEPROM organized as 1k × 8bit (BR24L08)  
16k bit serial EEPROM organized as 2k × 8bit (BR24L16)
- 2 wire bus serial interface
- Low operating voltage range (2V operating)  
Read : 1.8~5.5V  
Write : 1.8~5.5V
- Low current consumption  
Active : 2mA MAX  
Standby : 2 µA 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 : 16 byte
- 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



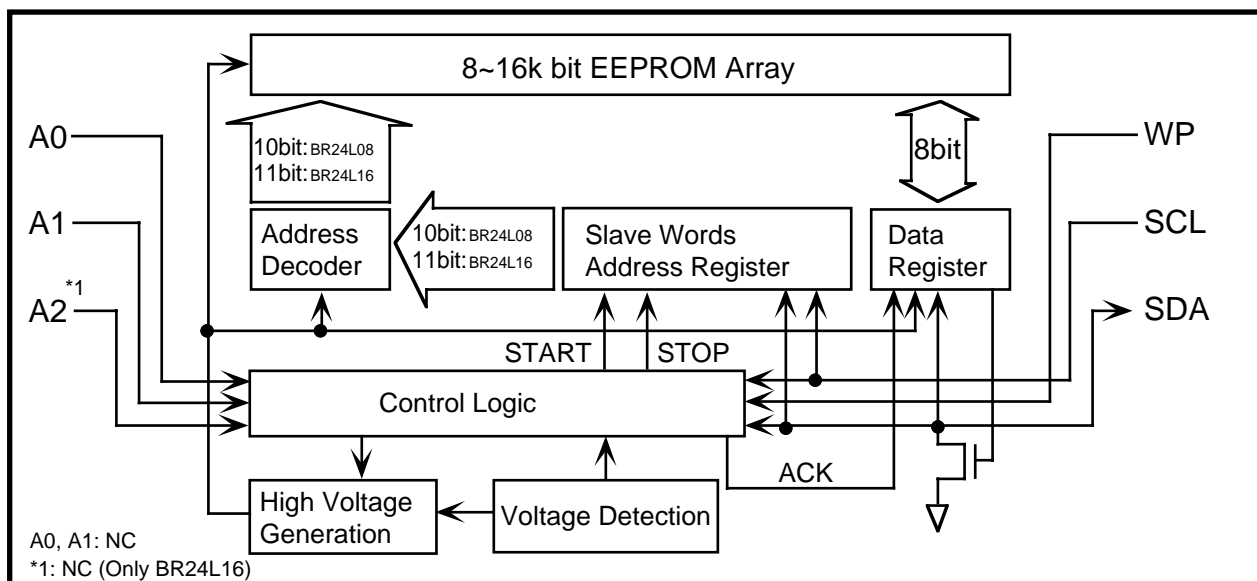
DIP8/SOP8/SOP-J8/SSOP-B8/MSOP8

\*1: NC (BR24L16)

## Pin Functions

Pin Names	Functions	
	BR24L08	BR24L16
A0, A1	Not used, Ground	
A2	Slave Address Inputs	Not used
GND	Ground	
SDA	Serial Data Input/Output	
SCL	Serial Data Clock	
WP	Write Protect	
Vcc	Power Supply	

## Block Diagram



ROHM EEPROM  
1.8V Low voltage  
operating

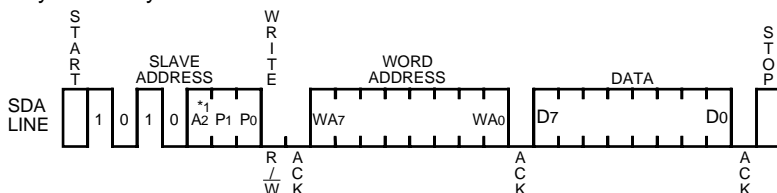
ROHM EEPROM  
1,000,000  
Write cycle

ROHM EEPROM  
Double Cell

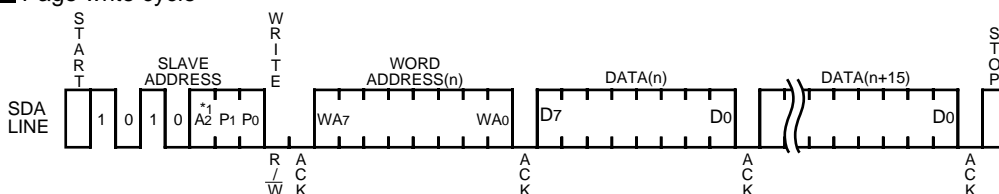
## Serial 2 Wire Interface (I<sup>2</sup>C BUS Type)

### Timing chart

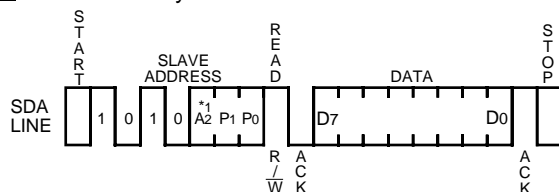
#### ■ Byte write cycle



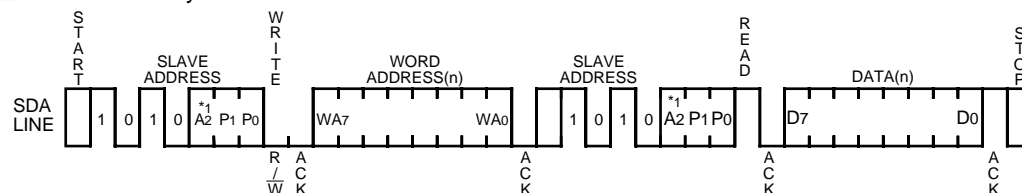
#### ■ Page write cycle



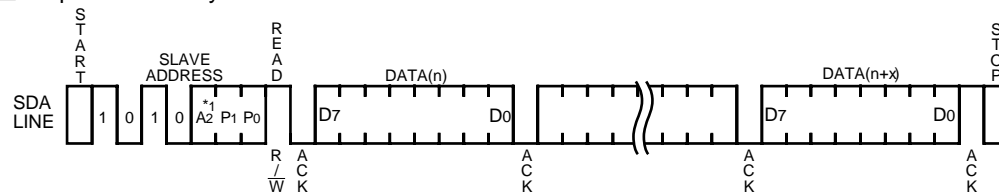
#### ■ Current read cycle



#### ■ Random read cycle



#### ■ Sequential read cycle



\*1: P2 (BR24L16)

Note : BR24C08/F/FJ/FV have no letter "-W", but they are double-cell types.

BR24C16/F/FJ/FV are single-cell types.

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