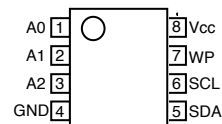


BR24E16-W/F-W/FJ-W/FV-W <Under development> BR24C32/F BR24C64-W/F-W <Under development>

Features

- 16k bit serial EEPROM organized as $2k \times 8\text{bit}$ (BR24E16)
32k bit serial EEPROM organized as $4k \times 8\text{bit}$ (BR24C32)
64k bit serial EEPROM organized as $8k \times 8\text{bit}$ (BR24C64)
- 2 wire bus serial interface (2 byte Address)
- Wide operating voltage range (3V operating)
Read : 2.7~5.5V
Write : 2.7~5.5V
- Low current consumption
Active : 3mA MAX ($V_{cc}=3\sim 5V$)
Standby : 3 μ A MAX ($V_{cc}=3\sim 5V$)
- Clock frequency : 100kHz MAX(3V), 400kHz MAX(5V)
- Write cycle time : 10ms MAX ($V_{cc}=3V, 5V$)
- Address auto-increment function during read operation
- Automatic erase-before-write function during write operation
- Page write function : 16byte (BR24E16)
32byte (BR24C32/BR24C64)
- Inadvertent write protection function
Inadvertent write protection at low voltage (V_{cc} Lock-out function)
- Schmitt trigger circuit and noise filter are built into SCL and SDA pins
- 100,000 write cycle typical
- 10 years data retention
- Operating temperature range : $-40\sim 85^{\circ}\text{C}$

Pin Configurations



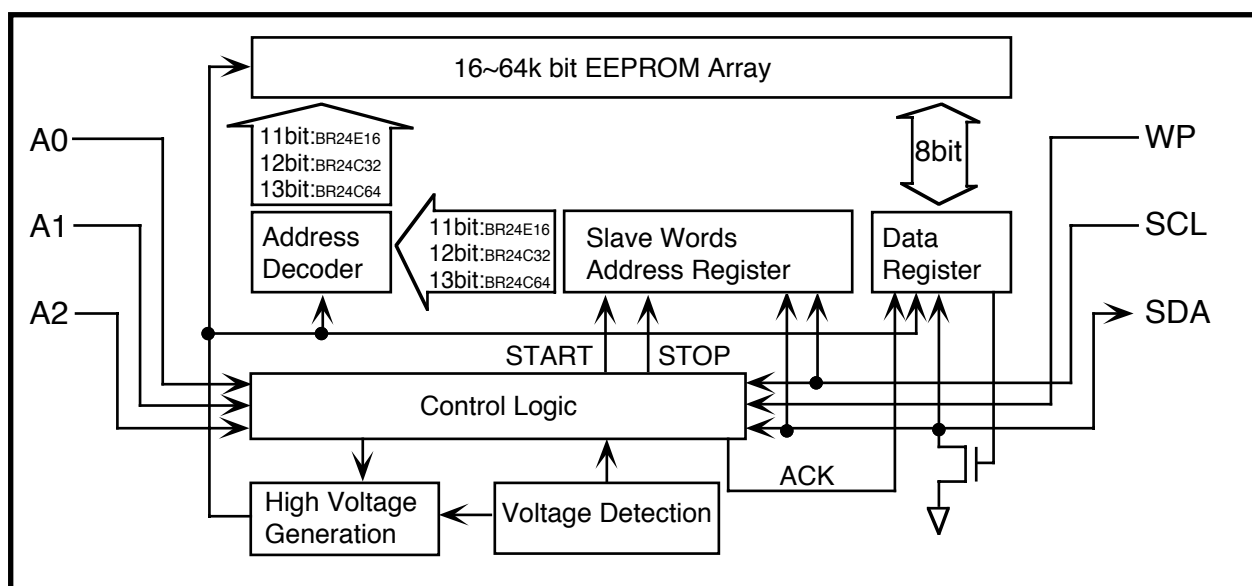
DIP8/SOP8/SOP-J8/SSOP-B8

DIP8/SOP8 (BR24C32, BR24C64F)

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

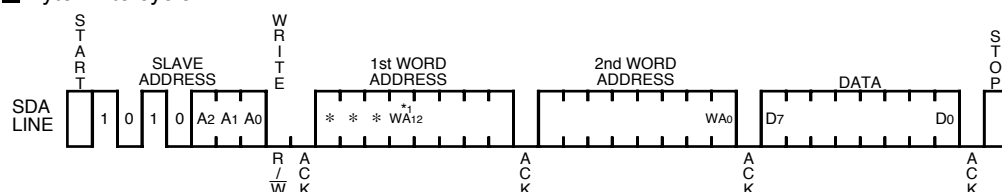
Block Diagram



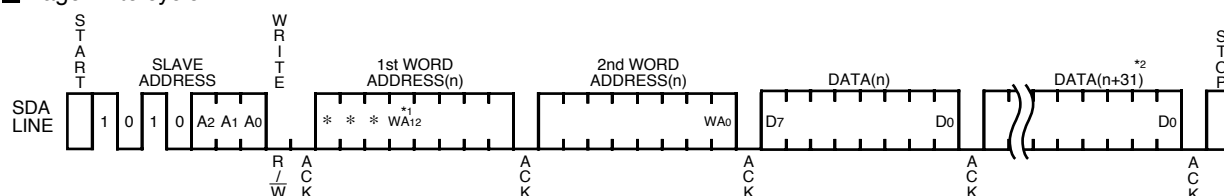
Serial 2 Wire (I²C BUS Type)

Timing chart

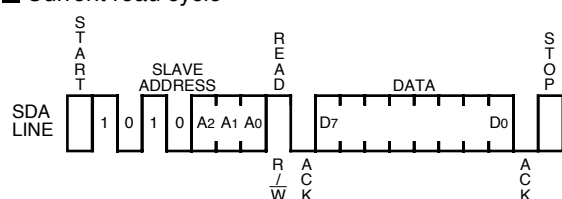
■ Byte write cycle



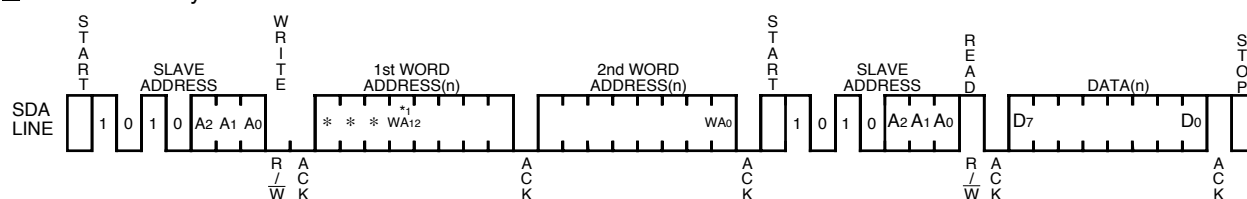
■ Page write cycle



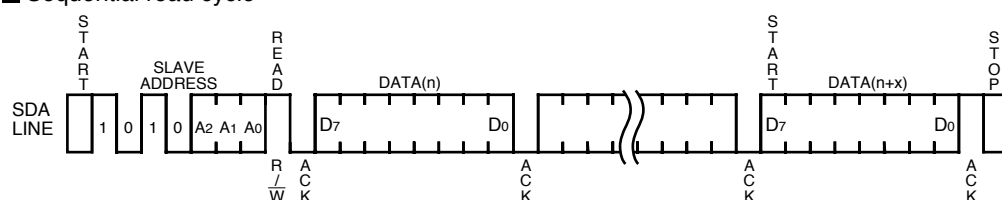
■ Current read cycle



■ Random read cycle



■ Sequential read cycle



*1: WA12...Don't Care (BR24C32), WA12, WA11...Don't Care (BR24E16)

*2: (n+15) (BR24E16)

Note : Double-cell type (BR24C32/F).

Single-cell types (BR24E16/F/FJ/FV, BR24C64/F).

"-W" means double-cell type.