

High Reliability Series

# SERIAL EEPROM

(Non volatile memory suitable for data saving)

## ROHM's merit

**1 3rd position in worldwide market.** (Research by ROHM)

Our products are used throughout the industry for various application in world wide market.

**2 Sufficient line up.**

Various range of products in line up (bus, density, package).  
Implementation of data writing service to reduce a customer process.

**3 High reliability EEPROM.**

Zero random failure. Unique double-cell construction and double reset functionally prevents data write errors and safeguard important data.

**4 In house manufacturing.**

The highest quality is ensured through an integrated production process, from wafer to assembly.

**5 ECO-friendly parts.**

All products conform to RoHS directive, lead free and halogen free.  
Realize low current consumption and low standby current design.

\*RoHS (restriction of the use of certain hazardous substance in electrical and electronic equipment)

## New WL-CSP compatibility

<b>New</b> I <sup>2</sup> C Bus compatibility	Density	2Kbit	4Kbit	8Kbit	16Kbit	32Kbit	32Kbit	64Kbit
	Product name	BU9833GUL-W	BU9847GUL-W	BU9889GUL-W	BU9844GUL-W	BU9890GUL-W	BU99901GUZ-W	BU9889GUL-W
	Package LxWxH(mm)	1.5x1.27x0.55	1.95x1.06x0.55	1.64x1.04x0.55	1.84x1.60x0.55	1.76x1.05x0.55	1.76x1.05x0.35	2.02x1.63x0.55
<b>New</b> SPI Bus compatibility	Density	8Kbit		16Kbit + LDO		128Kbit		
	Product name	BU9832GUL-W		BU9829GUL-W		BR25S128GUZ-W		
	Package LxWxH(mm)	1.85x2.09x0.55		1.65x1.74x0.55		2.63x2.00x0.40		
<b>New</b> Microwire Bus compatibility	Density	4Kbit						
	Product name	BU9891GUL-W						
	Package LxWxH(mm)	1.64x1.04x0.55						

## I<sup>2</sup>C Bus compatibility

BR24L series (Supply voltage : 1.8V to 5.5V, Operating temperature : -40°C to +85°C type)

Density	Bit configuration	Product name and Package						
		SOP8	SOP-J8	SSOP-B8	TSSOP-B8	MSOP8	TSSOP-B8J	VSON008X2030
1Kbit	128 × 8	BR24L01AF-W	BR24L01AFJ-W	BR24L01AFV-W	BR24L01AFVT-W	BR24L01AFVM-W	BR24L01AFVJ-W	BR24L01ANUX-W
2Kbit	256 × 8	BR24L02F-W	BR24L02FJ-W	BR24L02FV-W	BR24L02FVT-W	BR24L02FVM-W	BR24L02FVJ-W	BR24L02NUX-W
4Kbit	512 × 8	BR24L04F-W	BR24L04FJ-W	BR24L04FV-W	BR24L04FVT-W	BR24L04FVM-W	BR24L04FVJ-W	BR24L04NUX-W

BR24S series (Supply voltage : 1.7V to 5.5V, Operating temperature : -40°C to +85°C type)

Density	Bit configuration	Product name and Package						
		SOP8	SOP-J8	SSOP-B8	TSSOP-B8	MSOP8	TSSOP-B8J	VSON008X2030
8Kbit	1K × 8	BR24S08F-W	BR24S08FJ-W	BR24S08FV-W	BR24S08FVT-W	BR24S08FVM-W	BR24S08FVJ-W	BR24S08NUX-W
16Kbit	2K × 8	BR24S16F-W	BR24S16FJ-W	BR24S16FV-W	BR24S16FVT-W	BR24S16FVM-W	BR24S16FVJ-W	BR24S16NUX-W
32Kbit	4K × 8	BR24S32F-W	BR24S32FJ-W	BR24S32FV-W	BR24S32FVT-W	BR24S32FVM-W	BR24S32FVJ-W	BR24S32NUX-W
64Kbit	8K × 8	BR24S64F-W	BR24S64FJ-W	BR24S64FV-W	BR24S64FVT-W	BR24S64FVM-W	BR24S64FVJ-W	—
128Kbit	16K × 8	BR24S128F-W	BR24S128FJ-W	BR24S128FV-W	BR24S128FVT-W	—	—	—
256Kbit	32K × 8	BR24S256F-W	BR24S256FJ-W	—	—	—	—	—

## SPI Bus compatibility

BR25L series (Supply voltage : 1.8V to 5.5V, Operating temperature : -40°C to +85°C type)

Density	Bit configuration	Product name and Package					
		SOP8	SOP-J8	SSOP-B8	TSSOP-B8	MSOP8	TSSOP-B8J
1Kbit	128 × 8	BR25L010F-W	BR25L010FJ-W	BR25L010FV-W	BR25L010FVT-W	BR25L010FVM-W	BR25L010FVJ-W
2Kbit	256 × 8	BR25L020F-W	BR25L020FJ-W	BR25L020FV-W	BR25L020FVT-W	BR25L020FVM-W	BR25L020FVJ-W
4Kbit	512 × 8	BR25L040F-W	BR25L040FJ-W	BR25L040FV-W	BR25L040FVT-W	BR25L040FVM-W	BR25L040FVJ-W
8Kbit	1K × 8	BR25L080F-W	BR25L080FJ-W	BR25L080FV-W	BR25L080FVT-W	—	—
16Kbit	2K × 8	BR25L160F-W	BR25L160FJ-W	BR25L160FV-W	BR25L160FVT-W	—	—
32Kbit	4K × 8	BR25L320F-W	BR25L320FJ-W	—	—	—	—
64Kbit	8K × 8	BR25L640F-W	BR25L640FJ-W	—	—	—	—

BR25H series (Supply voltage : 2.5V to 5.5V, Operating temperature : -40°C to +125°C type)

Density	Bit configuration	Product name and Package		
		SOP8	SOP-J8	TSSOP-B8
1Kbit	128 × 8	BR25H010F-WC	BR25H010FJ-WC	—
2Kbit	256 × 8	BR25H020F-WC	BR25H020FJ-WC	—
4Kbit	512 × 8	BR25H040F-WC	BR25H040FJ-WC	—
8Kbit	1K × 8	BR25H080F-WC	BR25H080FJ-WC	BR25H080FVT-WC
16Kbit	2K × 8	BR25H160F-WC	BR25H160FJ-WC	BR25H160FVT-WC
32Kbit	4K × 8	BR25H320F-WC	BR25H320FJ-WC	—

New BR25S series (Supply voltage : 1.7V to 5.5V, Operating temperature : -40°C to +85°C type)

Density	Bit configuration	Product name and Package						
		SOP8	SOP-J8	SSOP-B8	TSSOP-B8	MSOP8	TSSOP-B8J	VSON008X2030
32Kbit	4K × 8	BR25S320F-W	BR25S320FJ-W	BR25S320FV-W	BR25S320FVT-W	BR25S320FVM-W	BR25S320FVJ-W	BR25S320NUX-W
64Kbit	8K × 8	BR25S640F-W	BR25S640FJ-W	BR25S640FV-W	BR25S640FVT-W	BR25S640FVM-W	BR25S640FVJ-W	—
128Kbit	16K × 8	BR25S128F-W	BR25S128FJ-W	BR25S128FV-W	BR25S128FVT-W	—	—	—
256Kbit	32K × 8	BR25S256F-W	BR25S256FJ-W	—	—	—	—	—

## Microwire Bus compatibility

BR93L series (Supply voltage : 1.8V to 5.5V, Operating temperature : -40°C to +85°C type)

Density	Bit configuration	Product name and Package										* Pin rotated type
		SOP8	*SOP8	SOP-J8	*SOP-J8	SSOP-B8	*SSOP-B8	TSSOP-B8	*TSSOP-B8	MSOP8	TSSOP-B8J	
1Kbit	64 × 16	BR93L46RF-W	BR93L46F-W	BR93L46RFJ-W	BR93L46FJ-W	BR93L46RFV-W	BR93L46FV-W	BR93L46RFVT-W	BR93L46FVT-W	BR93L46RFVM-W	BR93L46FVJ-W	BR93L46RFVJ-W
2Kbit	128 × 16	BR93L56RF-W	BR93L56F-W	BR93L56RFJ-W	BR93L56FJ-W	BR93L56RFV-W	BR93L56FV-W	BR93L56RFVT-W	BR93L56FVT-W	BR93L56RFVM-W	BR93L56FVJ-W	BR93L56RFVJ-W
4Kbit	256 × 16	BR93L66RF-W	BR93L66F-W	BR93L66RFJ-W	BR93L66FJ-W	BR93L66RFV-W	BR93L66FV-W	BR93L66RFVT-W	BR93L66FVT-W	BR93L66RFVM-W	BR93L66FVJ-W	BR93L66RFVJ-W
8Kbit	512 × 16	BR93L76RF-W	BR93L76F-W	BR93L76RFJ-W	BR93L76FJ-W	BR93L76RFV-W	—	BR93L76RFVT-W	—	BR93L76RFVM-W	BR93L76RFVJ-W	BR93L76RFVJ-W
16Kbit	1K × 16	BR93L86RF-W	BR93L86F-W	BR93L86RFJ-W	BR93L86FJ-W	BR93L86RFV-W	—	BR93L86RFVT-W	—	BR93L86RFVM-W	BR93L86RFVJ-W	BR93L86RFVJ-W

BR93A series (Supply voltage : 2.5V to 5.5V, Operating temperature : -40°C to +105°C type)

Density	Bit configuration	Product name and Package		
		SOP8	SOP-J8	MSOP8
1Kbit	64 × 16	BR93A46RF-WM	BR93A46RFJ-WM	—
2Kbit	128 × 16	BR93A56RF-WM	BR93A56RFJ-WM	BR93A56RFVM-WM
4Kbit	256 × 16	BR93A66RF-WM	BR93A66RFJ-WM	BR93A66RFVM-WM
8Kbit	512 × 16	BR93A76RF-WM	BR93A76RFJ-WM	—
16Kbit	1K × 16	BR93A86RF-WM	BR93A86RFJ-WM	—

BR93H series (Supply voltage : 2.7V to 5.5V, Operating temperature : -40°C to +125°C type)

Density	Bit configuration	Product name and Package	
		SOP8	SOP-J8
2Kbit	128 × 16	BR93H56RF-WC	BR93H56RFJ-WC
4Kbit	256 × 16	BR93H66RF-WC	BR93H66RFJ-WC
8Kbit	512 × 16	BR93H76RF-WC	BR93H76RFJ-WC
16Kbit	1K × 16	BR93H86RF-WC	BR93H86RFJ-WC

Package Lineup LxWxH(mm)	SOP8	SOP-J8 (JEDEC Standards)	SSOP-B8	TSSOP-B8 (JEDEC Standards)	MSOP8	TSSOP-B8J (JEDEC Standards)	VSON008X2030	10001EAL01
	6.2x5.0x1.5	6.0x4.9x1.375	6.4x3.0x1.15	6.4x3.0x1.0	4.0x2.9x0.9max.	4.9x3.0x1.1max.	3.0x2.0x0.6max.	

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**ROHM Co., Ltd.**

21 Sain Mizosaki-cho, Ukyo-ku,  
Kyoto 615-8585 Japan  
TEL: +81-75-311-2121 FAX: +81-75-315-0172  
www.rohm.com

