

RENESAS TECHNICAL UPDATE

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Renesas Electronics Corporation

Product Category	EEPROM		Document No.	TN-PME-A002A/E	Rev.	1.00
Title	Standardize to Halogen-free for Renesas EEPROM molding compound		Information Category	Package change		
Applicable Product	Serial EEPROM	Lot No.	Reference Document	None		
	R1EX24xxx#Sx Series R1EX25xxx#Sx Series HN58X25xxx#Sx Series	After April 2013				

1. Summary

Renesas's EEPROM which are produced at the assembly / Final test site "MTEX VIETNAM CO.,LTD(MVC)" will standardize to Halogen-free for protection of the Earth's environment and the responding to your many requests.

Halogen-free products are equal to the current products(Halogen-included) on DC/AC characteristics and reliabilities.

We would appreciate your cooperation to recognition of this notification.

2. Corresponding products

All packaged serial EEPROM products(Assembly / Final test site:MVC)

R1EX24xxx#Sx series,R1EX25xxx#Sx series and HN58X25xxx#Sx series

3. Reason of change

The purpose are the protection of the Earth's environment and the responding to your many requests.

4. The list of change items

	Now	New
Renesas Part Number	No change (e.g.) R1EX24002ASAS0A	
Booking Part Number	Change on the next to last letter	
	(e.g.) R1EX24002ASAS0A#S0	(e.g.) R1EX24002ASAS0A#U0
Molding compound	Halogen-included	Halogen-free

Note. Halogen-free products are equal to the current products(Halogen-included) on DC/AC characteristics and reliabilities.

5. Schedule

1	Please inform us the necessity of the evaluation samples.	End of August 2012
2	Start to supply the evaluation samples.	September 2012
3	Start to supply the reliability report and environment data.	September 2012
4	Start mass production of halogen-free products.	April 2013

*Halogen-included products are limited to stock after April 2013.

We can accept a bulk order the Halogen-included products, if you need them.

Please contact your sales representative.(End of September 2012)

6. List of part number(P/N)

Interface	Memory density	Renesas Part Number	Booking Part Number (Halogen-included)	Booking Part Number (Halogen-free)
I2C-bus	2Kbit	R1EX24002ASAS0A	R1EX24002ASAS0A#S0	R1EX24002ASAS0A#U0
I2C-bus	2Kbit	R1EX24002ASAS0I	R1EX24002ASAS0I#S0	R1EX24002ASAS0I#U0
I2C-bus	2Kbit	R1EX24002ASAS0I	R1EX24002ASAS0I#S1	R1EX24002ASAS0I#U1
I2C-bus	2Kbit	R1EX24002ATAS0A	R1EX24002ATAS0A#S0	R1EX24002ATAS0A#U0
I2C-bus	2Kbit	R1EX24002ATAS0I	R1EX24002ATAS0I#S0	R1EX24002ATAS0I#U0
I2C-bus	2Kbit	R1EX24002ATAS0I	R1EX24002ATAS0I#S1	R1EX24002ATAS0I#U1
I2C-bus	4Kbit	R1EX24004ASAS0A	R1EX24004ASAS0A#S0	R1EX24004ASAS0A#U0
I2C-bus	4Kbit	R1EX24004ASAS0I	R1EX24004ASAS0I#S0	R1EX24004ASAS0I#U0
I2C-bus	4Kbit	R1EX24004ASAS0I	R1EX24004ASAS0I#S1	R1EX24004ASAS0I#U1
I2C-bus	4Kbit	R1EX24004ATAS0A	R1EX24004ATAS0A#S0	R1EX24004ATAS0A#U0
I2C-bus	4Kbit	R1EX24004ATAS0I	R1EX24004ATAS0I#S0	R1EX24004ATAS0I#U0
I2C-bus	4Kbit	R1EX24004ATAS0I	R1EX24004ATAS0I#S1	R1EX24004ATAS0I#U1
I2C-bus	8Kbit Partial WP	R1EX24008ASA00A	R1EX24008ASA00A#S0	R1EX24008ASA00A#U0
I2C-bus	8Kbit Partial WP	R1EX24008ASA00I	R1EX24008ASA00I#S0	R1EX24008ASA00I#U0
I2C-bus	8Kbit	R1EX24008ASAS0A	R1EX24008ASAS0A#S0	R1EX24008ASAS0A#U0
I2C-bus	8Kbit	R1EX24008ASAS0I	R1EX24008ASAS0I#S0	R1EX24008ASAS0I#U0
I2C-bus	8Kbit	R1EX24008ASAS0I	R1EX24008ASAS0I#S1	R1EX24008ASAS0I#U1
I2C-bus	8Kbit Partial WP	R1EX24008ATA00A	R1EX24008ATA00A#S0	R1EX24008ATA00A#U0
I2C-bus	8Kbit Partial WP	R1EX24008ATA00I	R1EX24008ATA00I#S0	R1EX24008ATA00I#U0
I2C-bus	8Kbit	R1EX24008ATAS0A	R1EX24008ATAS0A#S0	R1EX24008ATAS0A#U0
I2C-bus	8Kbit	R1EX24008ATAS0I	R1EX24008ATAS0I#S0	R1EX24008ATAS0I#U0
I2C-bus	8Kbit	R1EX24008ATAS0I	R1EX24008ATAS0I#S1	R1EX24008ATAS0I#U1
I2C-bus	16Kbit Partial WP	R1EX24016ASA00A	R1EX24016ASA00A#S0	R1EX24016ASA00A#U0
I2C-bus	16Kbit Partial WP	R1EX24016ASA00I	R1EX24016ASA00I#S0	R1EX24016ASA00I#U0
I2C-bus	16Kbit	R1EX24016ASAS0A	R1EX24016ASAS0A#S0	R1EX24016ASAS0A#U0
I2C-bus	16Kbit	R1EX24016ASAS0I	R1EX24016ASAS0I#S0	R1EX24016ASAS0I#U0
I2C-bus	16Kbit	R1EX24016ASAS0I	R1EX24016ASAS0I#S1	R1EX24016ASAS0I#U1
I2C-bus	16Kbit Partial WP	R1EX24016ATA00A	R1EX24016ATA00A#S0	R1EX24016ATA00A#U0
I2C-bus	16Kbit Partial WP	R1EX24016ATA00I	R1EX24016ATA00I#S0	R1EX24016ATA00I#U0
I2C-bus	16Kbit	R1EX24016ATAS0A	R1EX24016ATAS0A#S0	R1EX24016ATAS0A#U0
I2C-bus	16Kbit	R1EX24016ATAS0I	R1EX24016ATAS0I#S0	R1EX24016ATAS0I#U0
I2C-bus	16Kbit	R1EX24016ATAS0I	R1EX24016ATAS0I#S1	R1EX24016ATAS0I#U1
I2C-bus	32Kbit Partial WP	R1EX24032ASA00A	R1EX24032ASA00A#S0	R1EX24032ASA00A#U0
I2C-bus	32Kbit Partial WP	R1EX24032ASA00I	R1EX24032ASA00I#S0	R1EX24032ASA00I#U0
I2C-bus	32Kbit	R1EX24032ASAS0A	R1EX24032ASAS0A#S0	R1EX24032ASAS0A#U0
I2C-bus	32Kbit	R1EX24032ASAS0I	R1EX24032ASAS0I#S0	R1EX24032ASAS0I#U0
I2C-bus	32Kbit	R1EX24032ASAS0I	R1EX24032ASAS0I#S1	R1EX24032ASAS0I#U1
I2C-bus	32Kbit Partial WP	R1EX24032ATA00A	R1EX24032ATA00A#S0	R1EX24032ATA00A#U0
I2C-bus	32Kbit Partial WP	R1EX24032ATA00I	R1EX24032ATA00I#S0	R1EX24032ATA00I#U0
I2C-bus	32Kbit	R1EX24032ATAS0A	R1EX24032ATAS0A#S0	R1EX24032ATAS0A#U0
I2C-bus	32Kbit	R1EX24032ATAS0I	R1EX24032ATAS0I#S0	R1EX24032ATAS0I#U0
I2C-bus	32Kbit	R1EX24032ATAS0I	R1EX24032ATAS0I#S1	R1EX24032ATAS0I#U1
I2C-bus	64Kbit Partial WP	R1EX24064ASA00A	R1EX24064ASA00A#S0	R1EX24064ASA00A#U0
I2C-bus	64Kbit Partial WP	R1EX24064ASA00I	R1EX24064ASA00I#S0	R1EX24064ASA00I#U0
I2C-bus	64Kbit	R1EX24064ASAS0A	R1EX24064ASAS0A#S0	R1EX24064ASAS0A#U0
I2C-bus	64Kbit	R1EX24064ASAS0I	R1EX24064ASAS0I#S0	R1EX24064ASAS0I#U0
I2C-bus	64Kbit	R1EX24064ASAS0I	R1EX24064ASAS0I#S1	R1EX24064ASAS0I#U1
I2C-bus	64Kbit Partial WP	R1EX24064ATA00A	R1EX24064ATA00A#S0	R1EX24064ATA00A#U0
I2C-bus	64Kbit Partial WP	R1EX24064ATA00I	R1EX24064ATA00I#S0	R1EX24064ATA00I#U0
I2C-bus	64Kbit	R1EX24064ATAS0A	R1EX24064ATAS0A#S0	R1EX24064ATAS0A#U0
I2C-bus	64Kbit	R1EX24064ATAS0I	R1EX24064ATAS0I#S0	R1EX24064ATAS0I#U0
I2C-bus	64Kbit	R1EX24064ATAS0I	R1EX24064ATAS0I#S1	R1EX24064ATAS0I#U1
I2C-bus	128Kbit Partial WP	R1EX24128ASA00A	R1EX24128ASA00A#S0	R1EX24128ASA00A#U0
I2C-bus	128Kbit Partial WP	R1EX24128ASA00I	R1EX24128ASA00I#S0	R1EX24128ASA00I#U0
I2C-bus	128Kbit	R1EX24128ASAS0A	R1EX24128ASAS0A#S0	R1EX24128ASAS0A#U0
I2C-bus	128Kbit	R1EX24128ASAS0I	R1EX24128ASAS0I#S0	R1EX24128ASAS0I#U0
I2C-bus	128Kbit	R1EX24128ASAS0I	R1EX24128ASAS0I#S1	R1EX24128ASAS0I#U1
I2C-bus	128Kbit Partial WP	R1EX24128ATA00A	R1EX24128ATA00A#S0	R1EX24128ATA00A#U0
I2C-bus	128Kbit Partial WP	R1EX24128ATA00I	R1EX24128ATA00I#S0	R1EX24128ATA00I#U0
I2C-bus	128Kbit	R1EX24128ATAS0A	R1EX24128ATAS0A#S0	R1EX24128ATAS0A#U0
I2C-bus	128Kbit	R1EX24128ATAS0I	R1EX24128ATAS0I#S0	R1EX24128ATAS0I#U0
I2C-bus	128Kbit	R1EX24128ATAS0I	R1EX24128ATAS0I#S1	R1EX24128ATAS0I#U1

I2C-bus	256Kbit	Partial WP	R1EX24256ASA00A	R1EX24256ASA00A#S0	R1EX24256ASA00A#U0
I2C-bus	256Kbit	Partial WP	R1EX24256ASA00I	R1EX24256ASA00I#S0	R1EX24256ASA00I#U0
I2C-bus	256Kbit		R1EX24256ASAS0A	R1EX24256ASAS0A#S0	R1EX24256ASAS0A#U0
I2C-bus	256Kbit		R1EX24256ASAS0I	R1EX24256ASAS0I#S0	R1EX24256ASAS0I#U0
I2C-bus	256Kbit		R1EX24256ASAS0I	R1EX24256ASAS0I#S1	R1EX24256ASAS0I#U1
I2C-bus	128Kbit		R1EX24128BSAS0A	R1EX24128BSAS0A#S0	R1EX24128BSAS0A#U0
I2C-bus	128Kbit		R1EX24128BSAS0I	R1EX24128BSAS0I#S0	R1EX24128BSAS0I#U0
I2C-bus	128Kbit		R1EX24128BSAS0I	R1EX24128BSAS0I#S1	R1EX24128BSAS0I#U1
I2C-bus	128Kbit		R1EX24128BTAS0A	R1EX24128BTAS0A#S0	R1EX24128BTAS0A#U0
I2C-bus	128Kbit		R1EX24128BTAS0I	R1EX24128BTAS0I#S0	R1EX24128BTAS0I#U0
I2C-bus	128Kbit		R1EX24128BTAS0I	R1EX24128BTAS0I#S1	R1EX24128BTAS0I#U1
I2C-bus	256Kbit		R1EX24256BSAS0A	R1EX24256BSAS0A#S0	R1EX24256BSAS0A#U0
I2C-bus	256Kbit		R1EX24256BSAS0I	R1EX24256BSAS0I#S0	R1EX24256BSAS0I#U0
I2C-bus	256Kbit		R1EX24256BSAS0I	R1EX24256BSAS0I#S1	R1EX24256BSAS0I#U1
I2C-bus	256Kbit		R1EX24256BTAS0A	R1EX24256BTAS0A#S0	R1EX24256BTAS0A#U0
I2C-bus	256Kbit		R1EX24256BTAS0I	R1EX24256BTAS0I#S0	R1EX24256BTAS0I#U0
I2C-bus	256Kbit		R1EX24256BTAS0I	R1EX24256BTAS0I#S1	R1EX24256BTAS0I#U1
I2C-bus	512Kbit		R1EX24512BSAS0A	R1EX24512BSAS0A#S0	R1EX24512BSAS0A#U0
I2C-bus	512Kbit		R1EX24512BSAS0I	R1EX24512BSAS0I#S0	R1EX24512BSAS0I#U0
I2C-bus	512Kbit		R1EX24512BSAS0I	R1EX24512BSAS0I#S1	R1EX24512BSAS0I#U1
I2C-bus	512Kbit		R1EX24512BTAS0A	R1EX24512BTAS0A#S0	R1EX24512BTAS0A#U0
I2C-bus	512Kbit		R1EX24512BTAS0I	R1EX24512BTAS0I#S0	R1EX24512BTAS0I#U0
I2C-bus	512Kbit		R1EX24512BTAS0I	R1EX24512BTAS0I#S1	R1EX24512BTAS0I#U1
SPI-bus	2Kbit		R1EX25002ASA00A	R1EX25002ASA00A#S0	R1EX25002ASA00A#U0
SPI-bus	2Kbit		R1EX25002ASA00I	R1EX25002ASA00I#S0	R1EX25002ASA00I#U0
SPI-bus	2Kbit		R1EX25002ASA00I	R1EX25002ASA00I#S1	R1EX25002ASA00I#U1
SPI-bus	2Kbit		R1EX25002ATA00A	R1EX25002ATA00A#S0	R1EX25002ATA00A#U0
SPI-bus	2Kbit		R1EX25002ATA00I	R1EX25002ATA00I#S0	R1EX25002ATA00I#U0
SPI-bus	2Kbit		R1EX25002ATA00I	R1EX25002ATA00I#S1	R1EX25002ATA00I#U1
SPI-bus	4Kbit		R1EX25004ASA00A	R1EX25004ASA00A#S0	R1EX25004ASA00A#U0
SPI-bus	4Kbit		R1EX25004ASA00I	R1EX25004ASA00I#S0	R1EX25004ASA00I#U0
SPI-bus	4Kbit		R1EX25004ATA00A	R1EX25004ATA00A#S0	R1EX25004ATA00A#U0
SPI-bus	4Kbit		R1EX25004ATA00A	R1EX25004ATA00A#SN	R1EX25004ATA00A#SN
SPI-bus	4Kbit		R1EX25004ATA00I	R1EX25004ATA00I#S0	R1EX25004ATA00I#U0
SPI-bus	8Kbit		R1EX25008ASA00A	R1EX25008ASA00A#S0	R1EX25008ASA00A#U0
SPI-bus	8Kbit		R1EX25008ASA00I	R1EX25008ASA00I#S0	R1EX25008ASA00I#U0
SPI-bus	8Kbit		R1EX25008ATA00A	R1EX25008ATA00A#S0	R1EX25008ATA00A#U0
SPI-bus	8Kbit		R1EX25008ATA00I	R1EX25008ATA00I#S0	R1EX25008ATA00I#U0
SPI-bus	16Kbit		R1EX25016ASA00A	R1EX25016ASA00A#S0	R1EX25016ASA00A#U0
SPI-bus	16Kbit		R1EX25016ASA00I	R1EX25016ASA00I#S0	R1EX25016ASA00I#U0
SPI-bus	16Kbit		R1EX25016ASA00I	R1EX25016ASA00I#S1	R1EX25016ASA00I#U1
SPI-bus	16Kbit		R1EX25016ATA00A	R1EX25016ATA00A#S0	R1EX25016ATA00A#U0
SPI-bus	16Kbit		R1EX25016ATA00I	R1EX25016ATA00I#S0	R1EX25016ATA00I#U0
SPI-bus	16Kbit		R1EX25016ATA00I	R1EX25016ATA00I#S1	R1EX25016ATA00I#U1
SPI-bus	32Kbit		R1EX25032ASA00A	R1EX25032ASA00A#S0	R1EX25032ASA00A#U0
SPI-bus	32Kbit		R1EX25032ASA00I	R1EX25032ASA00I#S0	R1EX25032ASA00I#U0
SPI-bus	32Kbit		R1EX25032ASA00I	R1EX25032ASA00I#S1	R1EX25032ASA00I#U1
SPI-bus	32Kbit		R1EX25032ATA00A	R1EX25032ATA00A#S0	R1EX25032ATA00A#U0
SPI-bus	32Kbit		R1EX25032ATA00I	R1EX25032ATA00I#S0	R1EX25032ATA00I#U0
SPI-bus	32Kbit		R1EX25032ATA00I	R1EX25032ATA00I#S1	R1EX25032ATA00I#U1
SPI-bus	64Kbit		R1EX25064ASA00A	R1EX25064ASA00A#S0	R1EX25064ASA00A#U0
SPI-bus	64Kbit		R1EX25064ASA00I	R1EX25064ASA00I#S0	R1EX25064ASA00I#U0
SPI-bus	64Kbit		R1EX25064ASA00I	R1EX25064ASA00I#S1	R1EX25064ASA00I#U1
SPI-bus	64Kbit		R1EX25064ATA00A	R1EX25064ATA00A#S0	R1EX25064ATA00A#U0
SPI-bus	64Kbit		R1EX25064ATA00A	R1EX25064ATA00A#SN	R1EX25064ATA00A#UN
SPI-bus	64Kbit		R1EX25064ATA00I	R1EX25064ATA00I#S0	R1EX25064ATA00I#U0
SPI-bus	64Kbit		R1EX25064ATA00I	R1EX25064ATA00I#S1	R1EX25064ATA00I#U1
SPI-bus	512kbit		R1EX25512ASA00A	R1EX25512ASA00A#S0	R1EX25512ASA00A#U0
SPI-bus	512kbit		R1EX25512ATA00A	R1EX25512ATA00A#S0	R1EX25512ATA00A#U0
SPI-bus	512kbit		R1EX25512ATA00A	R1EX25512ATA00A#SN	R1EX25512ATA00A#UN
SPI-bus	512kbit		R1EX25512ATA00I	R1EX25512ATA00I#S0	R1EX25512ATA00I#U0
SPI-bus	128kbit		HN58X25128FPI	HN58X25128FPI#S0	HN58X25128FPI#U0
SPI-bus	256kbit		HN58X25256FPI	HN58X25256FPI#S0	HN58X25256FPI#U0
SPI-bus	256kbit		HN58X25256FPI	HN58X25256FPI#ST	HN58X25256FPI#ST
SPI-bus	128kbit		HN58X25128FPIAG	HN58X25128FPIAG#S0	HN58X25128FPIAG#U0
SPI-bus	128kbit		HN58X25128FPIAG	HN58X25128FPIAG#S1	HN58X25128FPIAG#U1
SPI-bus	256kbit		HN58X25256FPIAG	HN58X25256FPIAG#S0	HN58X25256FPIAG#U0
SPI-bus	256kbit		HN58X25256FPIAG	HN58X25256FPIAG#S1	HN58X25256FPIAG#U1