Everywhere you imagine. RENESAS

Low-power SRAM

From 256kB to 64MB (multi-chip package)

www.renesas.eu

Renesas will continue to offer and support a complete SRAM product portfolio over the long term. From the ongoing production of our low density series (256kB, 1MB, 2MB), through the extremely popular medium densities (4MB, 8MB), to the introduction of a new type of memory cell enabling higher density with the same high reliability (16MB, 32MB and 64MB (MCP)), we are committed to meeting customers' future SRAM needs. While Renesas SRAMs work in perfect partnership with our world-leading microcontrollers, their compliance with all industry-standard requirements ensures wide-reaching compatibility with any system.

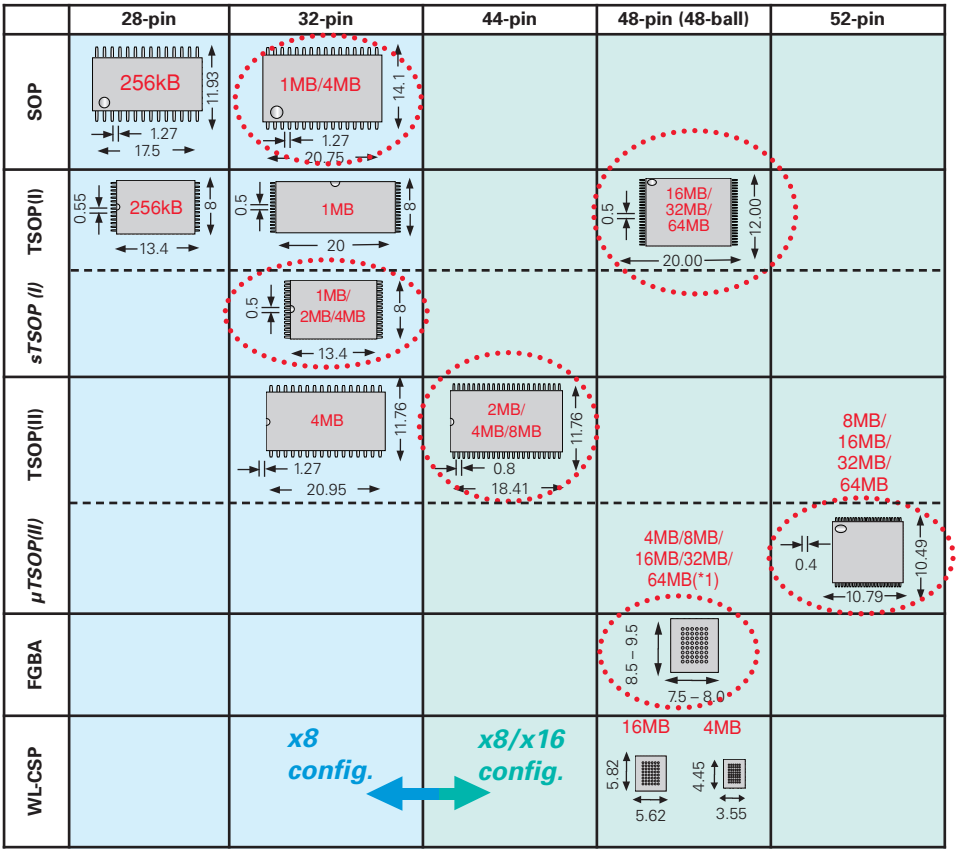
Key features of core low-power SRAM technology:

- high reliability
- smaller die size
- latch-up free
- soft-error free

Package line up for Renesas low-power SRAM

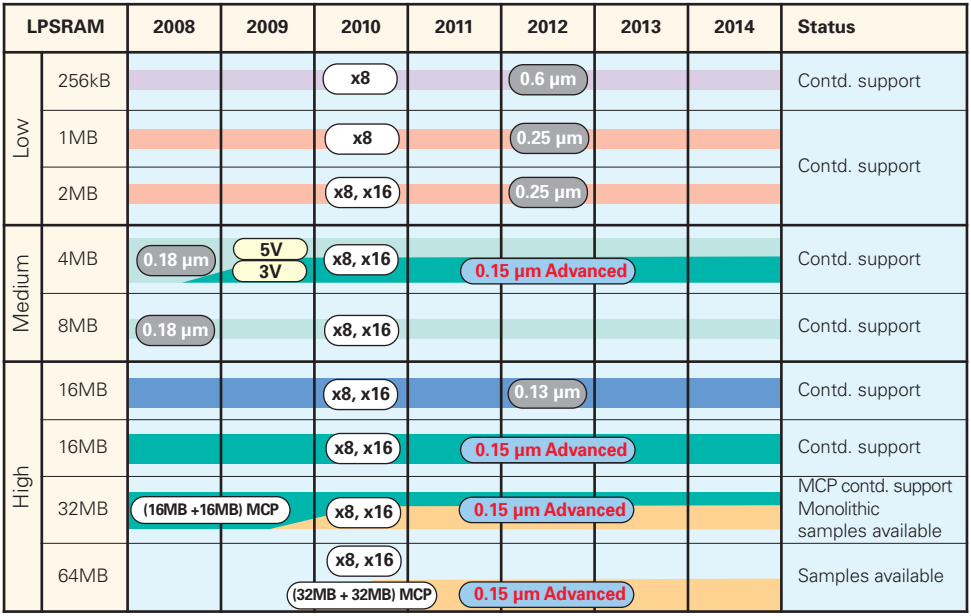
Renesas provides six kinds of packages, which are upwards compatible, making it easy to expand density without changing the PCB.

(*1) Package size for 64MB FBGA is under consideration.



Standard SRAM roadmap

As of November 2008



Density	Type	Voltage	Package	Access time
Low density (256kB, 1MB, 2MB) series				
256kB	M5M5256D series	5V 3.3V	SOP, TSOP (sTSOP size)	55ns/70ns
1MB	M5M51008D, M5M5V108D series	5V 3.3V	SOP, TSOP, sTSOP	55ns/70ns
2MB	M5M5V208A, M5M5V216A series	3.3V	TSOP sTSOP	55ns/70ns
Medium density (4MB, 8MB) series				
4MB*	R1LP0408C,R1LV0408D*	5V, 3.3V	SOP, TSOP,sTSOP, FBGA	55/70ns
8MB	M5M5W816, M5M5W817	3.3V	µTSOP, TSOP, FBGA	55ns
	HM628100, HM6216514 HM62V8100 series	5V, 3.3V	TSOP	55ns
High density (16MB, 32MB, 64MB) series				
16MB	R1LV1616H Series	3.3V	TSOP, FBGA	45ns/55ns/On chip ECC
Advanced LPSRAM				
16MB*	R1LV1616R series	3.3V	µTSOP, TSOP, FBGA	55ns/ 70ns New type memory cell
32MB*	R1WV3216R series (MCP)	3.3V	µTSOP, FBGA	55ns/ 70ns/85ns New type memory cell
	R1LV3216R series (Monolithic)	3.3V	µTSOP, TSOP	55ns/ 70ns New type memory cell
64MB*	R1WV6416R series (MCP)	3.3V	µTSOP, TSOP, FBGA	55ns/ 70ns New type memory cell

* = Advanced technology

Useful links

Please see:

www.eu.renesas.com/LPSRAM-doc
for Renesas low-power SRAM technical documentation.

www.eu.renesas.com/LPSRAM-xref
for applicable Renesas low-power SRAM cross-reference list.

www.eu.renesas.com/LPSRAM-sales
for Renesas-franchised European distributors and sales locations.

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