

Micron® Memory Support for Renesas® Platforms

		Internal	Micron External Memory									
			NOR		NAND			DRAM				
			Serial NOR	Parallel NOR	SLC NAND	e.MMC	SSD	eUSB	LPDDR4	DDR3	DDR2	SDR SDRAM
Micron Memory	Product	Flash Embedded in Renesas Controller	Serial NOR	Parallel NOR	SLC NAND	e.MMC	SSD	eUSB	LPDDR4	DDR3	DDR2	SDR SDRAM
	Family		MT35X, MT25T, MT25Q	MT28EW, MT29FW	MT29F	MTFC	MTFD	MTED	MT53	MT41	MT47	MT48
	Voltage		1.8V, 3.3V	3.3V	1.8V, 3.3V	3.3V	3.3V, 5V	3.3V, 5V	1.1V	1.35V, 1.5V	1.8V	3.3V
	Speed		50–200 MHz SDR/DDR	Async 70–105ns	ONFI 1.0/2.2/3.0	e.MMC 4.41, 4.51, 5.x	SATA 6 Gb/s	USB 2.0, 3.1	3200M bps	800–2133M bps	800M bps	133–167 MHz
	Width		x4, x8	x8, x16	x1, x2, x4, x8, x16	–	–	–	x32	x8, x16	x8, x16	x8, x16, x32
	Density		128Mb–2Gb	128Mb–2Gb	1Gb–512Gb	2GB–128GB	32GB–1TB	2GB–32GB	4Gb–16Gb	1Gb–8Gb	512Mb–2Gb	64Mb–256Mb
System on Chips (SOCs) Aligned with Micron Memory												
Renesas® Products	R-Car H3, M3	–	✓* (H3: MT25T, MT25Q, M3: MT35X, MT25T, MT25Q)			✓ (e.MMC5.x)	✓*	✓*	✓			
	R-Car H2, M2, E2, V2H	–	✓ (MT25T, MT25Q)	✓*	✓*	✓* (e.MMC4.41)	✓* (H2, M2: 2ch)	✓* (H2, M2: 4 ports, E2: 2 ports)		✓ (800 MHz, H2, M2: 32 bits x 2ch E2, V2H: 32 bits x 1ch)		
	R-Car H1, M1x, E1	–		✓		✓ (e.MMC4.41)	✓*	✓*		✓ (H1: 500 MHz, 32 bits x 2ch, M1x: 533 MHz, 32 bits, E1: 533 MHz, 16 bits)	✓ (H1: 500 MHz, 32 bits, M1x: 400MHz, 32 bits, E1: 400 MHz, 16 bits)	
	R-Car D1	–	✓*		✓*	✓* (e.MMC4.41)		✓*		✓* (1.35V, 1066/1333 MHz, 32 bits x 1ch)		
	R-Car W1R, W2R	RAM: 128KB ROM: 32KB	No external memory interface									
	R-Car W2H	RAM: 32K/ 32K/512KE	✓* (QSPI)					✓* (USB 2.0)		✓* (32 bits x 1ch)		
	R-Car T2	RAM: 512KB	✓* (QSPI x 1ch)									
	SH7769, 7766, 7786, 7761, 7776 (SH Navi)	–		✓*	✓* (7786)	✓* (7769)	✓* (7776)	✓* (7769, 7776)		✓ (7766: 356 MHz x16, 7786: 533 MHz x32, 7769: 533 MHz x16, 7776: 533 MHz x16/32)		
R-IN32M3, M4	–	✓* (x1/x2/x4, SDR, 50 MHz)	✓*									

*For additional details, please contact your local Micron sales representative.

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		Internal	Micron External Memory									
			NOR		NAND			DRAM				
Micron Memory	Product		Serial NOR	Parallel NOR	SLC NAND	e.MMC	SSD	eUSB	LPDDR4	DDR3	DDR2	SDR SDRAM
	Family	MT35X, MT25T, MT25Q	MT28EW, MT29FW	MT29F	MTFC	MTFD	MTED	MT53	MT41	MT47	MT48	
	Voltage	1.8V, 3.3V	3.3V	1.8V, 3.3V	3.3V	3.3V, 5V	3V, 5V	1.1V	1.35V, 1.5V	1.8V	3.3V	
	Speed	50–200 MHz, SDR/DDR	Async 70–105ns	ONFI 1.0/2.2/3.0	e.MMC 4.41, 4.51, 5.x	SATA 6 Gb/s	USB 2.0, 3.1	3200M bps	800–2133M bps	800 bps	133–167 MHz	
	Width	x4, x8	x8, x16	x1, x2, x4, x8, x16	–	–	–	x32	x8, x16	x8, x16	x8, x16, x32	
	Density	128Mb–1Gb	128Mb–2Gb	1Gb–5126Gb	2GB–128GB	32GB–1TB	2GB–32GB	4Gb–16Gb	1Gb–8Gb	512Mb–2Gb	64Mb–256Mb	
Microcontrollers (MCUs) and Microprocessors (MPUs) Aligned with Micron Memory												
Renesas® Products	RZ/A1H, A1M, A1LU, A1L	–	✓* (QSPI, SDR/DDR, 50/66 MHz, 2ch)	✓	✓*	✓		✓*			✓	
	RZ/G1M, G1N, G1E	–	✓* (QSPI, SDR, 97.5 MHz max, 1ch)	✓*			✓*	✓*	✓* (G1M: 800 MHz x32 x 2ch G1N: 800 MHz x32 x 1ch G1E: 667 MHz x32 x 1ch)			
	RZ/T1		✓*								✓* (32-bit bus)	
	RH850/D1Mx, D1Lx	5MB max (code) + 8KB (data)	✓ (L1: x4 SDR 40 MHz L2: x4 SDR 120/DTR 80 Mx, L2H: x8 SDR 120/DTR 80)							✓ (M2: 240 MHz, x16/ M2H: 240 MHz, x32)	✓ (M1H: 80 MHz, x32)	
	RH850/E1	RAM: 160-320KB / 8KB ROM: 2-4MB / 64KB								No external memory interface		
	RX700, RX600	4MB max (code) + 64KB (700) / 32KB (600) (data)	✓* (QSPI, SDR, 60 MHz)			✓* (e.MMC 4.41)		✓*				✓* (60 MHz, x8/x16/x32)
	RX200, RX100	1MB max (code) + 8KB (data)								No external memory interface		
Synergy Microcontrollers Aligned with Micron Memory												
	S7	4MB + 64KB	✓* (QSPI)			✓* (e.MMC 4.51)		✓*			✓* (60/120 MHz)	
	S5	128KB (code) + 4KB (data)										
	S3	1MB + 16KB	✓* (QSPI)			✓* (e.MMC 4.51)		✓*				
	S1	1MB + 16KB	✓* (QSPI)			✓* (e.MMC 4.51)		✓*				

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