

Micron® Memory Support for Renesas® Platforms

		Internal	External Memory										
Micron Memory	Product		NOR		NAND					DRAM			
	Family	Serial NOR, Xccela™	Parallel NOR	SLC NAND	e.MMC	SSD	µSD/SD	eUSB	LPDDR4	DDR3/3L	DDR2	SDR SDRAM	
	Voltage	MT35X, MT25T, MT25Q	MT28EW, MT29FW	MT29F	MTFC	MTFD	MTSD	MTED	MT53	MT41	MT47	MT48	
	Speed	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	
	Width	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	Class 10 (UHS-I U1)	USB 2.0, 3.1	3200 Mb/s	800–2133 Mb/s	800 Mb/s	133–167 MHz	
	Density	x4, x8	x8, x16	x1, x2, x4 (SPI) x8 x16 (Parallel)	–	–	–	–	x32	x8, x16	x8, x16	x8, x16, x32	
		128Mb–2Gb	128Mb–1Gb	1Gb–4Gb	2GB–128GB	>32GB	>32GB	2GB–16GB	4Gb–32Gb	1Gb–8Gb	512Mb–4Gb	64Mb–512Mb	
System on Chips (SOCs) Aligned with Micron Memory													
Renesas Products	R-Car H3, M3, E3	–	✓				(e.MMC 5.0)	✓	✓	✓	(H3, M3)	(E3)	
	R-Car H2, M2, E2, V2H	–	(MT25T, MT25Q)	✓	✓		(e.MMC 4.41)	(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.MMC 4.41)	✓	✓	✓		(H1: 500 MHz, 32 bits x 2ch, M1x: 533 MHz, 32 bits, E1: 533 MHz, 16 bits)	(H1: 500 MHz, 32 bits, M1x: 400 MHz, 32 bits, E1: 400 MHz, 16 bits)
	R-Car V3M, V3H	–	(2ch: MT25Q, 1ch: MT35X, MT25T)				(V3M: e.MMC 4.51, V3H: e.MMC 5.0)				(V3H)	(V3M) (800 MHz, 32 bits x 1ch)	
	R-Car D3	–	(2ch: MT25Q, 1ch: MT35X, MT25T)		✓		✓					(933 MHz, 16 bits x 1ch)	
	R-Car D1	–	✓		✓		(e.MMC 4.41)				✓	(1.35V, 1066/1333 MHz, 32 bits x 1ch)	
	R-Car W1R	32KB											No external memory interface
	R-Car T2	–	(QSPI x 1ch)										
Microcontrollers (MCUs) and Microprocessors (MPUs) Aligned with Micron Memory													
RH850/D1Mx, D1Lx	5MB MAX (code) + 8KB (data)	(L1: x4 SDR (40 MHz) L2: x4 SDR (120 MHz)/ DTR (80 MHz) MAX, L2H: x8 SDR (120 MHz)/ DTR (80 MHz)										(M2: 240 MHz, x16/ M2H: 240 MHz, x32)	(M1H: 80 MHz, x32)
SH7769, 7766, 7786, 7761, 7776/7 (SH Navi)	–		✓	✓ (7786)	✓ (7769)	✓ (7776)	✓	✓ (7769, 7776/7)		✓ (7766: 356 MHz x16, 7786: 533 MHz x32, 7769: 533 MHz x16, 7776: 533 MHz x16/32)	✓ (7777: 400 MHz 32 bits)		

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

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		Internal	External Memory											
			NOR		NAND					DRAM				
Micron Memory	Product	Flash Embedded in Renesas Controller	Serial NOR, Xccela™	Parallel NOR	SLC NAND	e.MMC	SSD	µSD/SD	eUSB	LPDDR4	DDR3/3L	DDR2	SDR SDRAM	
	Family		MT35X, MT25T, MT25Q	MT28EW, MT29FW	MT29F	MTFC	MTFD	MTSD	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	Class 10 (UHS-I U1)	USB 2.0, 3.1	3200 Mb/s	800–2133 Mb/s	800 Mb/s	133–167 MHz	
	Width		x4, x8	x8, x16	x1, x2, x4 (SPI) x8 x16 (Parallel)	–	–	–	–	x32	x8, x16	x8, x16	x8, x16, x32	
	Density		128Mb–2Gb	128Mb–1Gb	1Gb–4Gb	2GB–128GB	>32GB	>32GB	2GB–16GB	4Gb–32Gb	1Gb–8Gb	512Mb–4Gb	64Mb–512Mb	
	Microcontrollers (MCUs) and Microprocessors (MPUs) Aligned with Micron Memory													
Renesas Products	RZ/A2M	–	✓ (Xccela 132 MHz, QSPI x1/4/8, 66 MHz)		✓	✓		✓	✓				✓	
	RZ/A1H, A1M, A1LU, A1L	–	✓ (QSPI, SDR/DDR, 50/66 MHz MAX, 2Ch)	✓	✓	✓		✓	✓				✓	
	RZ/G2H, G2M, G2N, G2E	–	✓ (QSPI, DDR, 160 MHz MAX, 2Ch)				✓ (e.MMC 5.0, HS400)	✓ (G2H, G2N)	✓	✓	✓ (G2H: 3200 Mb/s x32 x 1ch G2M: 3200 Mb/s x32 x 2ch G2N: 3200 Mb/s x32 x 4ch)	✓ (G2E: 1856 Mb/s x32 x 1ch)		
	RZ/G1H, G1M, G1N, G1E, G1C	–	✓ (QSPI, SDR, 97.5 MHz MAX, 1Ch)	✓			✓ (e.MMC 4.41)	✓ (G1H, G1M, G1N, G1E)	✓	✓		✓ (G1H: 1600 Mb/s, x32 x 2ch G1M: 1600 Mb/s x32 x 2ch G1N: 1600 Mb/s x32 x 1ch G1E: 1333 Mb/s x32 x 1ch G1C: 1000 Mb/s x32 x 1ch)		
	RZ/T1	–	✓										✓ (32-bit bus)	
	RZ/N1D, N1S, N1L	–	✓ (MT25Q)	✓	✓	✓		✓	✓		✓ (N1D only)	✓ (N1D only)		
	RX700, RX600	4MB MAX (code) + 64KB MAX (data)	✓ (QSPI, SDR 60 MHz)				✓ (e.MMC 4.41)		✓	✓				✓ (60 MHz MAX, 80 MHz for RX72M, x8/x16/x32)
	RX200, RX100	1MB MAX (code) + 8KB (data)	No external memory interface (except eUSB for RX111/113/230/231)											
	R-IN32M3, M4	–	✓ (x1/x2/x4, SDR, 50 MHz)	✓										
	S7G2	4MB + 64KB	✓ (QSPI)				✓ (e.MMC 4.51)		✓	✓				✓ (60/120 MHz)
	S5D3, S5D5, S5D9	2MB MAX (code) + 64KB (data)	✓ (QSPI)				✓ (e.MMC 4.51)		✓	✓				
	S3A1, S3A3, S3A6, S3A7	1MB MAX (code) + 16KB (data)	✓ (QSPI)				✓ (e.MMC 4.51)		✓	✓				
S124, S128, S1JA	256MB MAX (code) + 8KB (data)	✓ (QSPI x1)							✓					

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