



Platforms in Partnership with

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Micron® Memory Support for Renesas® Platforms

		Internal	Micron External Memory												
Micron Memory	Product	Flash Embedded in Renesas Controller	NOR		NAND					DRAM					
	Family		Serial NOR, Xccela™	Parallel NOR	SLC NAND	e.MMC	UFS	SSD	µSD/SD	eUSB	LPDDR4/4X	DDR4	DDR3/3L	DDR2	SDR SDRAM
	Voltage		MT35X, MT25T, MT25Q	MT28EW, MT29FW	MT29F	MTFC	MTFC	MTFD	MTSD	MTED	MT53	MT40	MT41	MT47	MT48
	Speed		1.8V, 3.3V	3.3V	1.8V, 3.3V	3.3V	3.3V	3.3V, 5V	-	3.3V, 5V	VDD1: 1.8V VDD2: 1.1V VDDQ: 1.1V/0.6V	1.2V	1.35V, 1.5V	1.8V	3.3V
	Width		50–200 MHz SDR/DDR	Async 70–105ns	ONFI 1.0/2.2	e.MMC 4.41, 4.51, 5.1	UFS 3.1	SATA 6 Gb/s PCIe Gen 3	Class 10 (UHS-I U1)	USB 2.0, 3.1	3200–4266 Mb/s	3200 Mb/s	1600–2133 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	x8, x16, x32
System on Chips (SOCs) Aligned with Micron Memory															
Renesas Products	R-Car S4	-	✓			✓ e.MMC 5.0	✓	✓ (PCIe)	✓		✓ (3200 Mb/s, 32 bits)				
	R-Car H3, M3, E3, H3e, H3Ne, M3e, M3Ne, E3e	-	✓			✓ e.MMC 5.0		✓ (SATA)	✓	✓	✓ H3: 3200 Mb/s, 128 bits M3: 3200 Mb/s, 64 bits	✓ E3: 1866 Mb/s, 32 bits			
	R-Car H2, M2, E2	-	✓ MT25T, MT25Q	✓	✓	✓ e.MMC 4.41		✓ H2, M2: SATA 2ch	✓	✓ H2, M2: 4 ports, E2: 2 ports		✓ 1600 Mb/s, H2, M2: 32 bits x 2ch E2: 32 bits x 1ch			
	R-Car V3U	-	✓ 2ch: MT25Q, 1ch: MT35X, MT25T			✓ e.MMC 5.0					✓ 4266 Mb/s, 128 bits				
	R-Car V3H2, V3H, V3M	-	✓ 2ch: MT25Q, 1ch: MT35X, MT25T			✓ V3M: e.MMC 4.51, V3H: e.MMC 5.0					✓ V3H: 3200 Mb/s, 32 bits	✓ V3M: 1600 Mb/s, 32 bits			
	R-CAR V2H	-	✓ MT25T, MT25Q	✓	✓	✓ e.MMC 4.41			✓			✓ 1600 Mb/s, 32 bits x 1ch			
	R-Car D3, D3e	-	✓ 2ch: MT25Q, 1ch: MT35X, MT25T		✓	✓						✓ 1866 Mb/s, 16 bits x 1ch			
	R-Car D1	-	✓		✓	✓ (e.MMC 4.41)			✓			✓			

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			NOR		NAND						DRAM				
Micron Memory	Product	Flash Embedded in Renesas Controller	Serial NOR, Xccela™	Parallel NOR	SLC NAND	e.MMC	UFS	SSD	μSD/SD	eUSB	LPDDR4/4X	DDR4	DDR3/3L	DDR2	SDR SDRAM
	Family		MT35X, MT25T, MT25Q	MT28EW, MT29FW	MT29F	MTFC	MTFC	MTFD	MTSD	MTED	MT53	MT40	MT41	MT47	MT48
	Voltage		1.8V, 3.3V	3.3V	1.8V, 3.3V	3.3V	3.3V	3.3V, 5V	–	3.3V, 5V	VDD1: 1.8V VDD2: 1.1V VDDQ: 1.1V/0.6V	1.2V	1.35V, 1.5V	1.8V	3.3V
	Speed		50–200 MHz SDR/DDR	Async 70–105ns	ONFI 1.0/2.2	e.MMC 4.41, 4.51, 5.1	UFS 3.1	SATA 6 Gb/s PCIe Gen 3	Class 10 (UHS-I U1)	USB 2.0, 3.1	3200–4266 Mb/s	3200 Mb/s	1600–2133 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	x8, x16, x32
	Density		128Mb–2Gb	128Mb–2Gb	1Gb–256Gb	4GB–128GB	128GB–256GB	>64GB	>8GB	2GB–32GB	4Gb–64Gb	8Gb–16Gb	1Gb–8Gb	512Mb–2Gb	64Mb–256Mb
Renesas Products															
Microcontrollers (MCUs) for Automotive Aligned with Micron Memory															
RH850/D1Mx, D1Lx	5MB MAX (code) + 8KB (data)	✓ D1L1: x4 SDR (40 MHz) D1L2: x4 SDR (120 MHz)/ DTR (80 MHz) D1Mx, D1L2H: x8 SDR (120 MHz)/ DTR (80 MHz)												✓ D1M2: 240 MHz, x16/ D1M2H: 240 MHz, x32	✓ D1M1H: 80 MHz, x32
RH850/U2A16	16MB max. (code) + 512KB (data)				✓										

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Micron® Memory Support for Renesas® Platforms

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			NOR		NAND						DRAM				
Micron Memory	Product	Flash Embedded in Renesas Controller	Serial NOR, Xccela™	Parallel NOR	SLC NAND	e.MMC	UFS	SSD	µSD/SD	eUSB	LPDDR4/4X	DDR4	DDR3/3L	DDR2	SDR SDRAM
	Family		MT35X, MT25T, MT25Q	MT28EW, MT29FW	MT29F	MTFC	MTFC	MTFD	MTSD	MTED	MT53	MT40	MT41	MT47	MT48
	Voltage		1.8V, 3.3V	3.3V	1.8V, 3.3V	3.3V	3.3V	3.3V, 5V	-	3.3V, 5V	VDD1: 1.8V VDD2: 1.1V VDDQ: 1.1V/0.6V	1.2V	1.35V, 1.5V	1.8V	3.3V
	Speed		50–200 MHz SDR/DDR	Async 70–105ns	ONFI 1.0/2.2	e.MMC 4.41, 4.51, 5.1	UFS 2.1, UFS 3.1	SATA 6 Gb/s	Class 10 (UHS-I U1)	USB 2.0, 3.1	3200–4266 Mb/s	3200 Mb/s	1600–2133 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	x8, x16, x32
	Density		128Mb–2Gb	128Mb–2Gb	1Gb–256Gb	2GB–128GB	32GB–256GB	>64GB	>8GB	2GB–32GB	4Gb–64Gb	8Gb–16Gb	1Gb–8Gb	512Mb–2Gb	64Mb–256Mb
Renesas Products															
Microprocessors (MPUs) Aligned with Micron Memory															
RZ/V2M, V2L	-	✓ V2L: Xccela 100 MHz QSPI SDR/DDR 66/50 MHz			✓ e.MMC 4.51				✓	✓	✓ (V2M: 3200 Mb/s, x32 1ch)	✓ (V2L: 1600 Mb/s, x16 1ch)	✓ (V2L: 1600 Mb/s, x16 1ch)		
RZ/A2M	-	✓ Xccela: 132 MHz QSPI: x1, 55 MHz		✓	✓ e.MMC 4.51				✓	✓					✓
RZ/A1H, A1M, A1LU, A1LC, A1L	-	✓ A1H, A1M: QSPI SDR 50 MHz, 1/2ch A1LU, A1L: QSPI SDR 66 MHz 1ch	✓	✓	✓ e.MMC 4.41				✓	✓					✓
RZ/G2H, G2M, G2N, G2E	-	✓ G2H,M,N: QSPI DDR 160 MHz MAX x4/x8 G2E: QSPI DDR 150/160 MHz MAX x4/x8			✓ e.MMC 5.0, HS400		✓ G2H, G2N: SATA Gen3		✓	✓	✓ 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/G2L, G2LC, G2UL	-	✓ G2L: QSPI, 50 MHz DDR, 66 MHz SDR, 100 MHz x8 G2LC: QSPI, 50 MHz DDR/66MHz SDR, 1ch			✓ e.MMC 4.51				✓	✓		✓ 1600 Mb/s x16 x 1ch	✓ 1333 Mb/s x16 x 1ch		

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Product	Family		NOR		NAND						DRAM			
		Serial NOR, Xcelera™	Parallel NOR	SLC NAND	e.MMC	UFS	SSD	µSD/SD	eUSB	LPDDR4/4X	DDR4	DDR3/3L	DDR2	SDR SDRAM
Micron Memory	Flash Embedded in Renesas Controller	MT35X, MT25T, MT25Q	MT28EW, MT29FW	MT29F	MTFC	MTFC	MTFD	MTSD	MTED	MT53	MT40	MT41	MT47	MT48
	Voltage	1.8V, 3.3V	3.3V	1.8V, 3.3V	3.3V	3.3V	3.3V, 5V	-	3.3V, 5V	VDD1: 1.8V VDD2: 1.1V VDDQ: 1.1V/0.6V	1.2V	1.35V, 1.5V	1.8V	3.3V
	Speed	50–200 MHz SDR/DDR	Async 70–105ns	ONFI 1.0/2.2	e.MMC 4.41, 4.51, 5.1	UFS 2.1, UFS 3.1	SATA 6 Gb/s	Class 10 (UHS-I U1)	USB 2.0, 3.1	3200–4266 Mb/s	3200 Mb/s	1600–2133 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	x8, x16, x32
	Density	128Mb–2Gb	128Mb–2Gb	1Gb–256Gb	2GB–128GB	32GB–256GB	>64GB	>8GB	2GB–32GB	4Gb–64Gb	8Gb–16Gb	1Gb–8Gb	512Mb–2Gb	64Mb–256Mb
	Microprocessors (MPUs) Aligned with Micron Memory													
Renesas Products	RZ/G1H, G1M, G1N, G1E	-	✓ QSPI SDR 48.75 MHz MAX, 1ch	✓	✓ e.MMC 4.41		✓ G1H, G1M, G1N: SATA Gen3	✓	✓			✓ DDR3: G1H: 1600Mb/s x32 x 2ch G1E: 1333Mb/s x32 x 1ch DDR3L: G1M: 1600Mb/s x32 x 2ch G1N: 1600Mb/s x32 x 1ch		
	RZ/T1, T1-M	-	✓	✓					✓					✓ T1: 32-bit bus
	RZ/N1D, N1S, N1L	-	✓ MT25Q	✓	✓			✓	✓			✓ N1D only	✓ N1D only	
	Microcontrollers (MCUs) Aligned with Micron Memory													
RX700, RX600	4MB MAX code + 64KB data	✓ QSPI, SDR 60 MHz			✓ e.MMC 4.51			✓	✓					✓ 60 MHz MAX 80MHz for RX72M, x8/x16/x32
RX200, RX100	1MB MAX code + 8KB MAX data	No external memory interface (except eUSB for RX111/113/230/231)												
R-IN32M3, M4	-	✓ x1/x2/x4, SDR, 50 MHz	✓											

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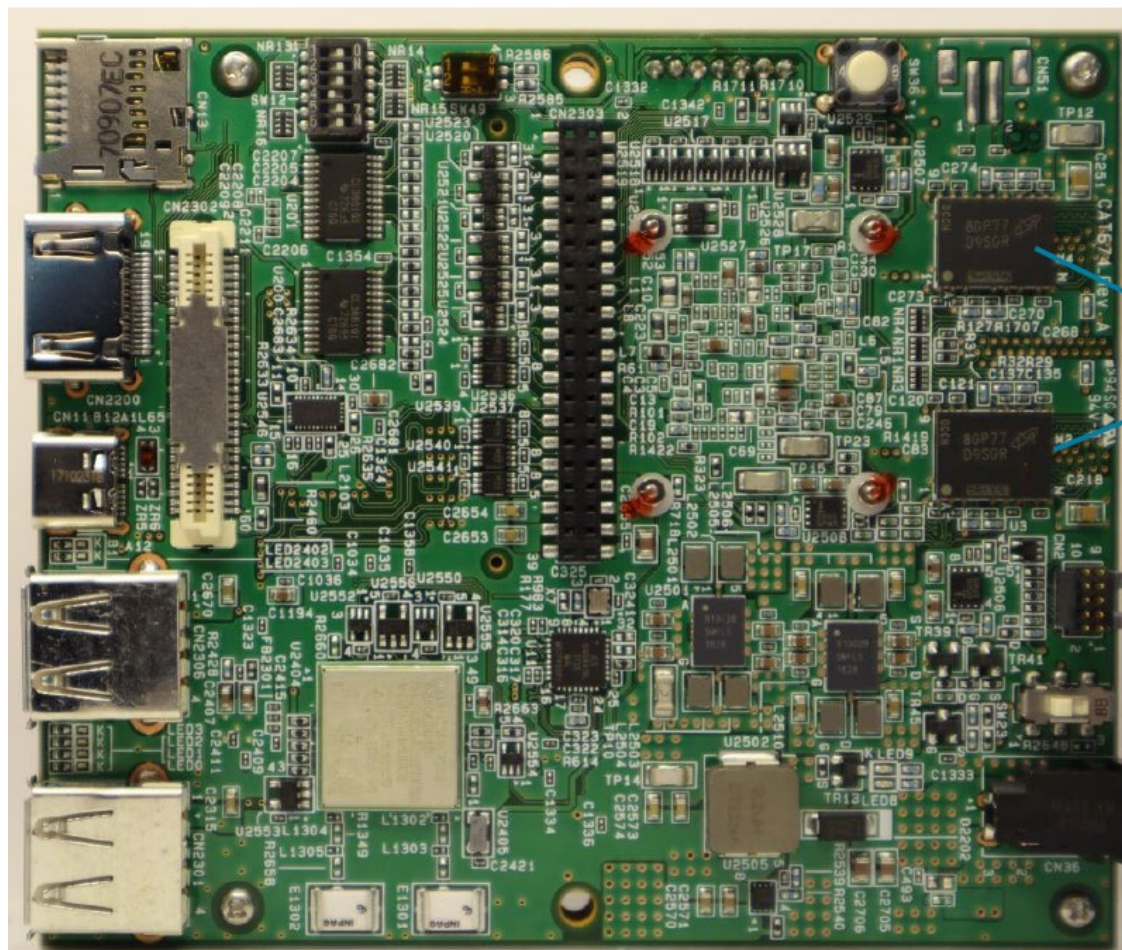


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		Internal	External Memory												
			NOR		NAND						DRAM				
Micron Memory	Product	Flash Embedded in Renesas Controller	Serial NOR, Xccela™	Parallel NOR	SLC NAND	e.MMC	UFS	SSD	µSD/SD	eUSB	LPDDR4/4X	DDR4	DDR3/3L	DDR2	SDR SDRAM
	Family		MT35X, MT25T, MT25Q	MT28EW, MT29FW	MT29F	MTFC	MTFC	MTFD	MTSD	MTED	MT53	MT40	MT41	MT47	MT48
	Voltage		1.8V, 3.3V	3.3V	1.8V, 3.3V	3.3V	3.3V	3.3V, 5V	-	3.3V, 5V	VDD1: 1.8V VDD2: 1.1V VDDQ: 1.1V/0.6V	1.2V	1.35V, 1.5V	1.8V	3.3V
	Speed		50–200 MHz SDR/DDR	Async 70–105ns	ONFI 1.0/2.2	e.MMC 4.41, 4.51, 5.1	UFS 2.1, UFS 3.1	SATA 6 Gb/s	Class 10 (UHS-I U1)	USB 2.0, 3.1	3200–4266 Mb/s	3200 Mb/s	1600–2133 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	x8, x16, x32
	Density		128Mb–2Gb	128Mb–2Gb	1Gb–256Gb	2GB–128GB	32GB–256GB	>64GB	>8GB	2GB–32GB	4Gb–64Gb	8Gb–16Gb	1Gb–8Gb	512Mb–2Gb	64Mb–256Mb
Renesas Products															
Microcontrollers (MCUs) Aligned with Micron Memory															
S7G2	4MB + 64KB	✓ QSPI			✓ e.MMC 4.51			✓	✓						✓ 60/120 MHz
S5D3, S5D5, S5D9	2MB MAX code + 64KB MAX data	✓ QSPI			✓ e.MMC 4.51			✓	✓						
S3A1, S3A3, S3A6, S3A7	1MB MAX code + 16KB MAX data	✓ QSPI			✓ e.MMC 4.51			✓	✓						
S124, S128, S1JA	256KB MAX code + 8KB MAX data	✓ QSPI							✓						
RE01-1500KB, RE01-256K	1.5MB MAX code	✓ QSPI							✓ 1500KB						
RA2, RA4, RA6, RA8	1MB MAX code + 64KB MAX data	✓ QSPI/Xccela			✓ RA6: eMMC 4.51			✓	✓						

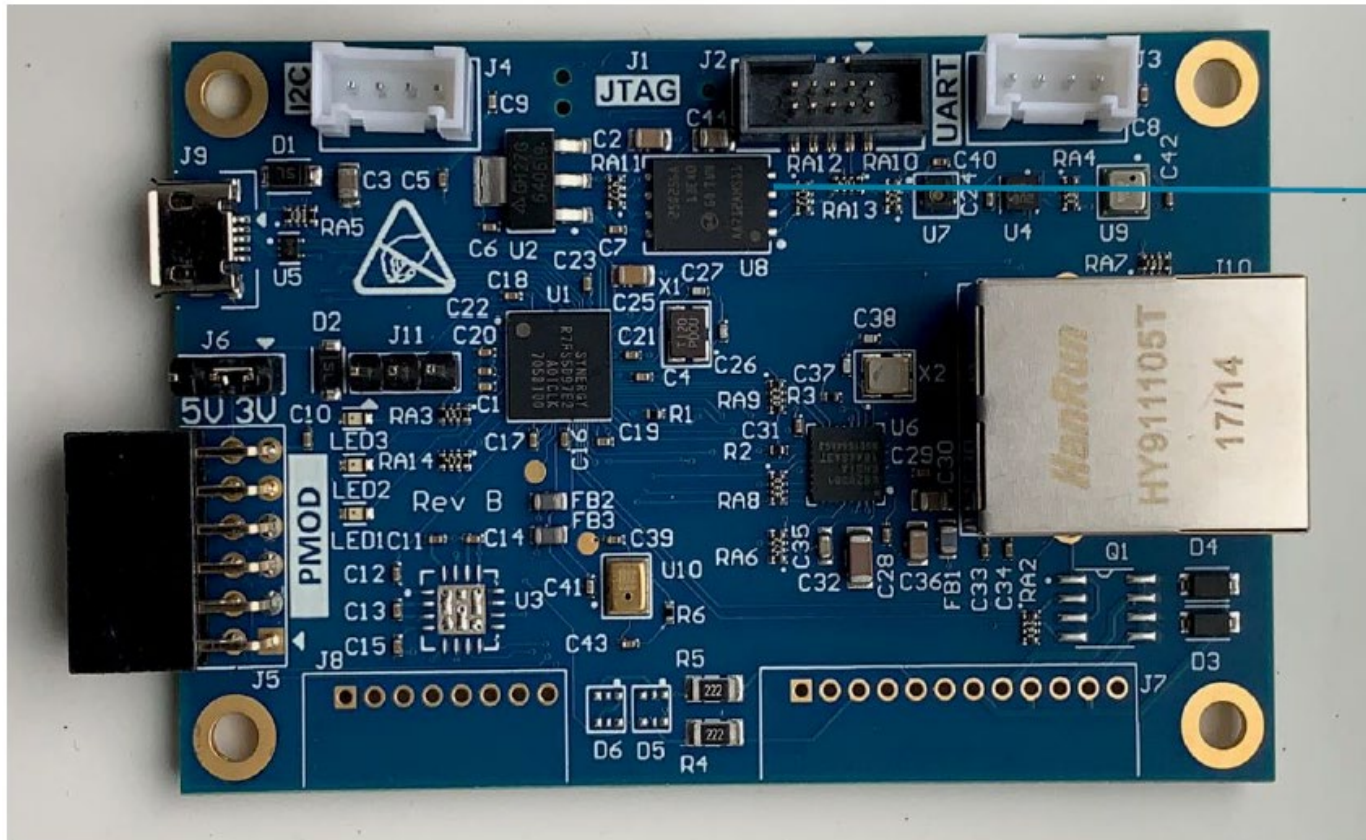
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RZ/G2E Board – Top Side



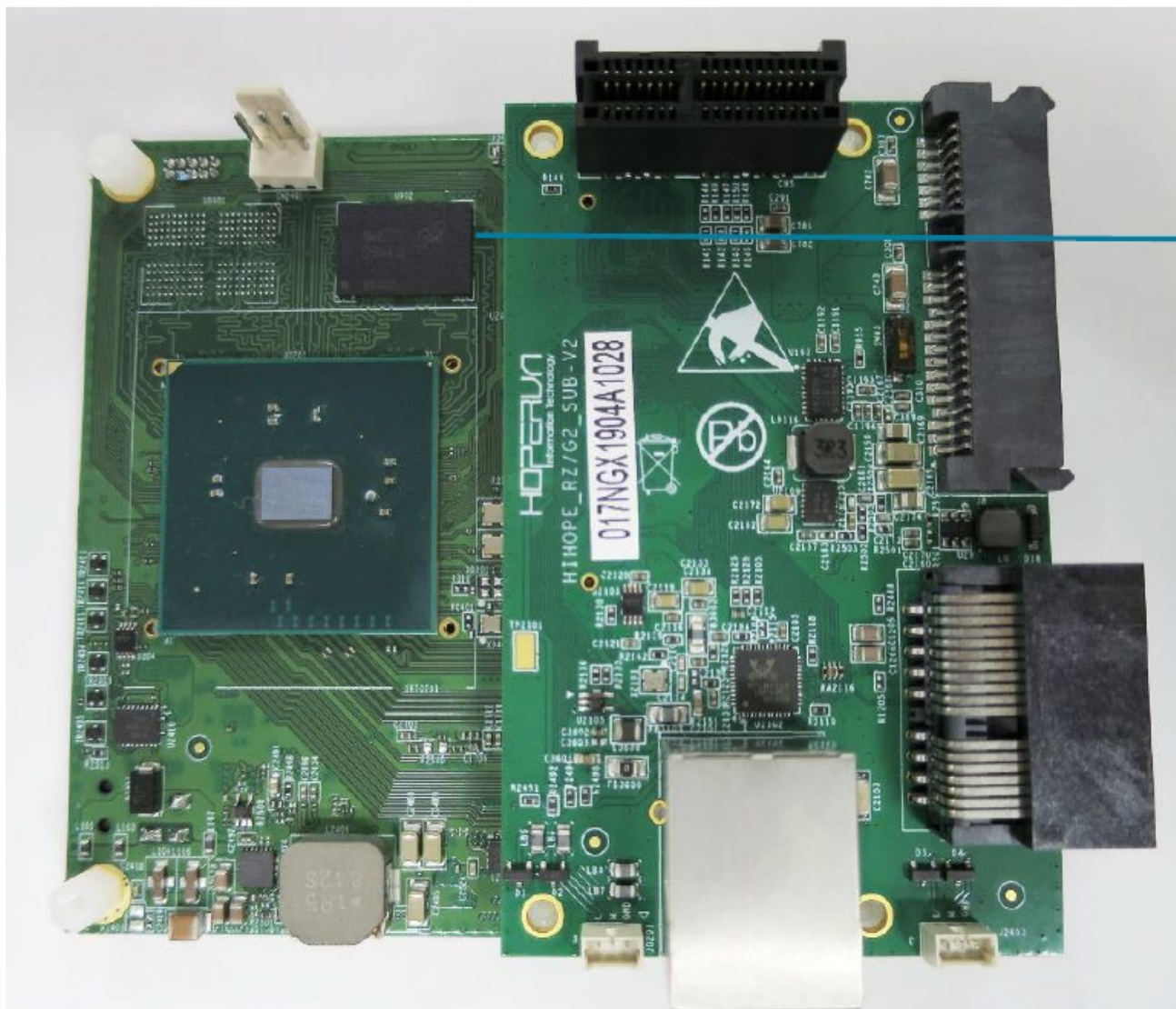
2GB total
Qty 4
4Gb DDR3
components

Synergy AE-CLOUD1 Platform



256Mb
Quad SPI
NOR

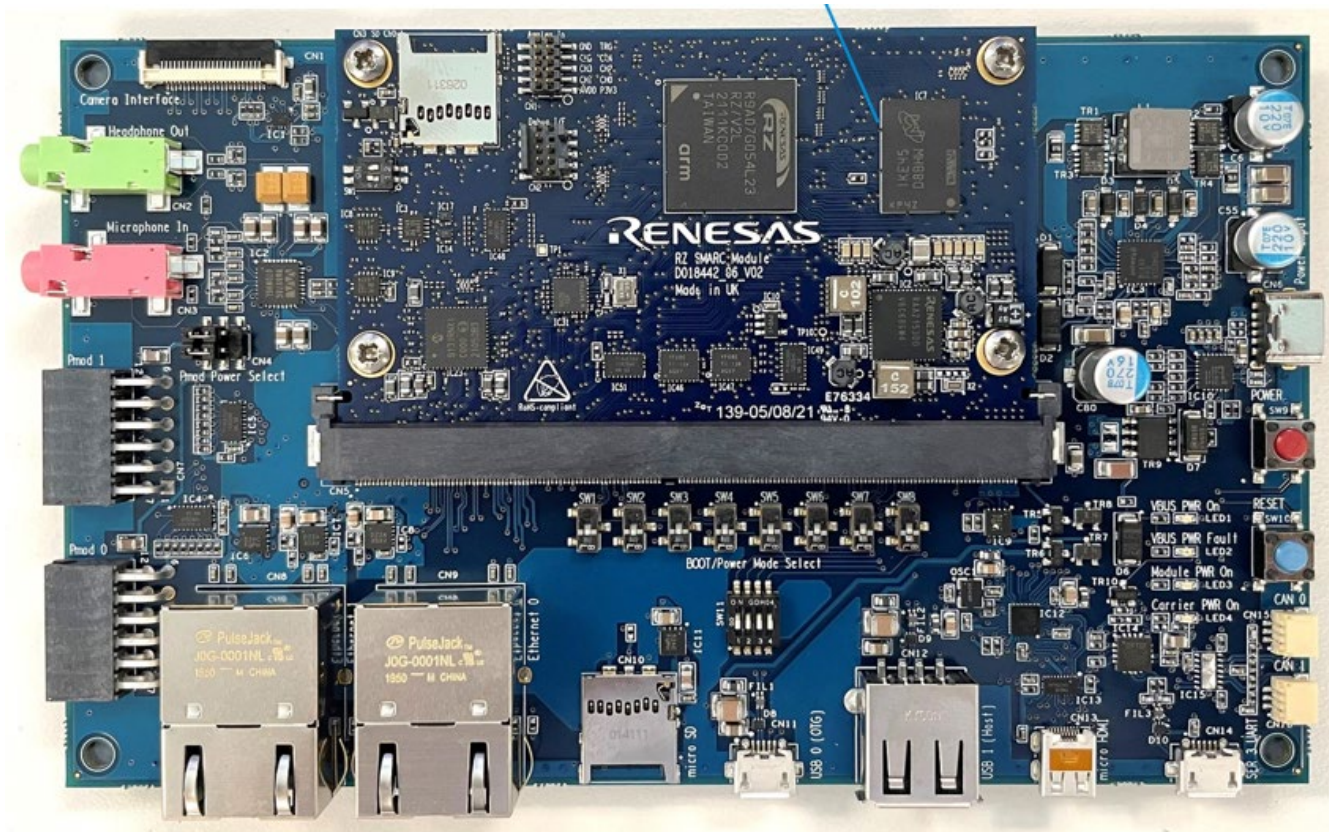
RZ/G2N Board



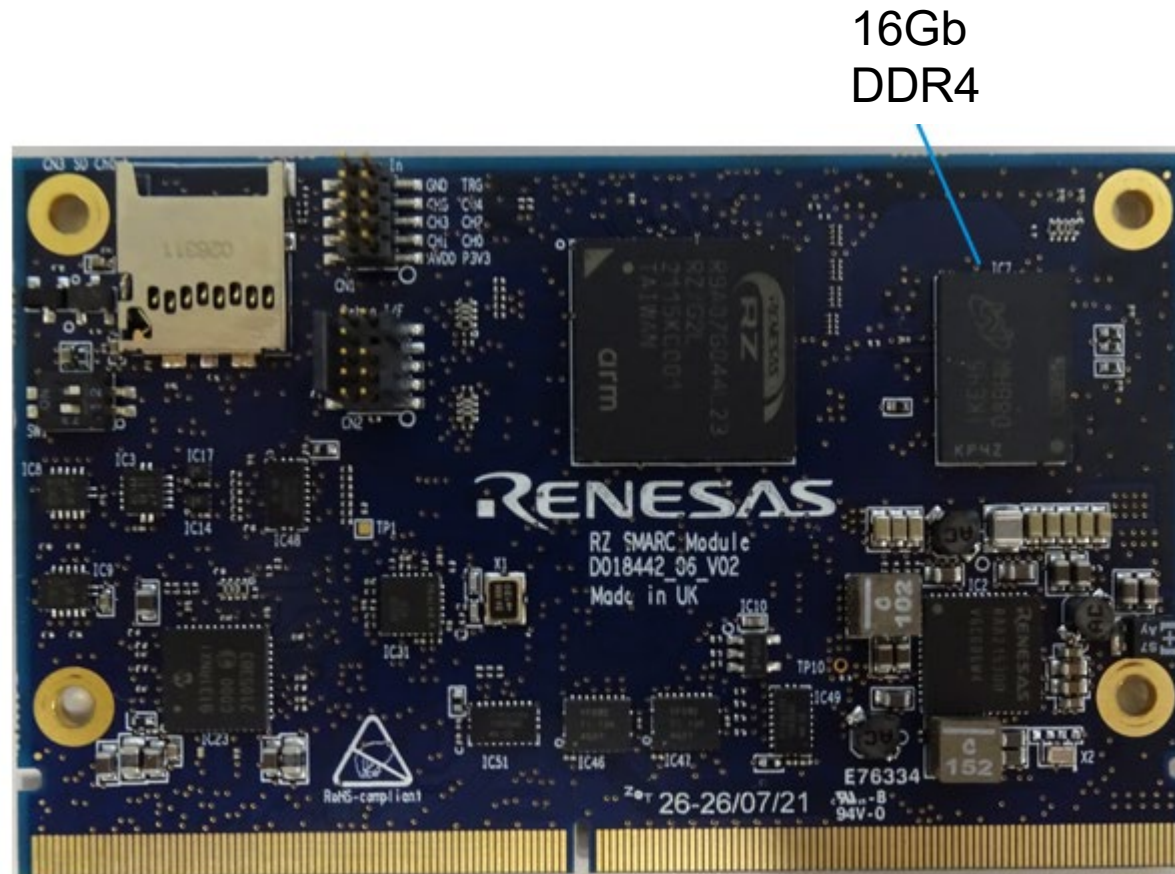
32GB
LPDDR4

RZ/V2L EVK Board – Top Side

16Gb
DDR4



RZ/G2L Board – Top Side



16Gb
DDR4

RZ/G2L Board – Bottom Side

512Mb
Quad SPI NOR

64GB
e.MMC



The Micron logo is centered on a solid blue background. It features a stylized white 'M' with a white orbital ring around it, followed by the word 'micron' in a white, lowercase, sans-serif font. A registered trademark symbol (®) is located at the top right of the word.

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