

RENESAS RZ FAMILY

PRODUCT PART NUMBER GUIDE

SEP 2026 (REV 2.7)

EMBEDDED PROCESSING MARKETING DIVISION
RENESAS ELECTRONICS CORPORATION



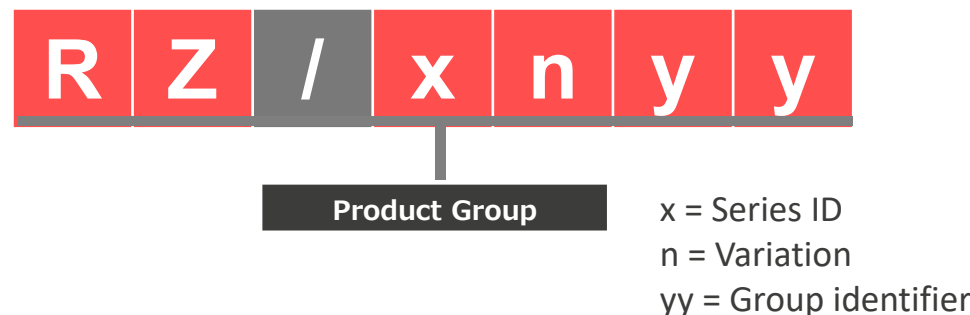
NOMENCLATURE OVERVIEW

- **Family Name:** RZ - Renesas Zenith
 - 32-bit & 64-bit high-performance MPUs

- **Series Name:** (RZ + "/" + 1 digit)
 - RZ/V : Vision-AI MPU
 - RZ/N : industrial Network MPU
 - RZ/T : real-Time control MPU
 - RZ/G : Graphics MPU for HMI*
 - RZ/A : general Application MPU



- **Group Name:** (RZ + "/" + 3 or 4 digits)
 - Examples:
 - RZ/G2L Group
 - RZ/A3UL Group



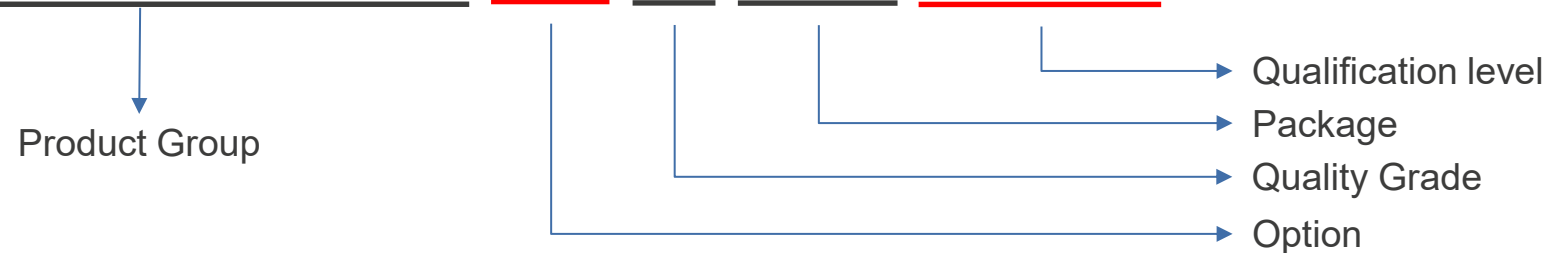
*RZ/G is originally for graphics application but now expands to IoT Edge application w/o graphics.

Series	Group identifier	Meaning
RZ/V	H	High-end
	M	Mid-range-1
	MA	Mid for Accelerator app
	N	Mid-Range-2 (Narrow)
	L	Low-end
RZ/N	D	Dual main core
	S	Single main core
	H	High-end
	L	Low-end
RZ/T	H	High-end
	N	Mid-range-2
	M	Mid-range-1
	L	Low-end
RZ/G	H	High-end
	M	Mid-Range-1
	N	Mid-Range-2 (Narrow)
	E	Mid-Range-3 (Entry)
	L	Low-end
	LC	Low-end Compact
	UL	Ultra Low-end
	Five*	RISC-V (*exception)
	S	IoT Line (Secure, w/o GPU)
RZ/A	H	High-end
	M	Mid-range
	LU	Low upper
	L	Low-end
	LC	Low-end Compact
	UL	Ultra Low-end

RZ/V SERIES

RZ/V2H GROUP

R9A09G057H xx G BG #xxn



Product Group	
R9A09G057H	RZ/V2H Group

Option			
	Quad Core + Realtime CPU		(RFU)
48	ISP and GPU, Secure		
47	(RFU)		
46	GPU only, Secure		
45	no ISP/GPU, Secure		
44	ISP and GPU, non-secure		
43	(RFU)		
42	GPU only, non-secure		
41	no ISP/GPU, non-secure		

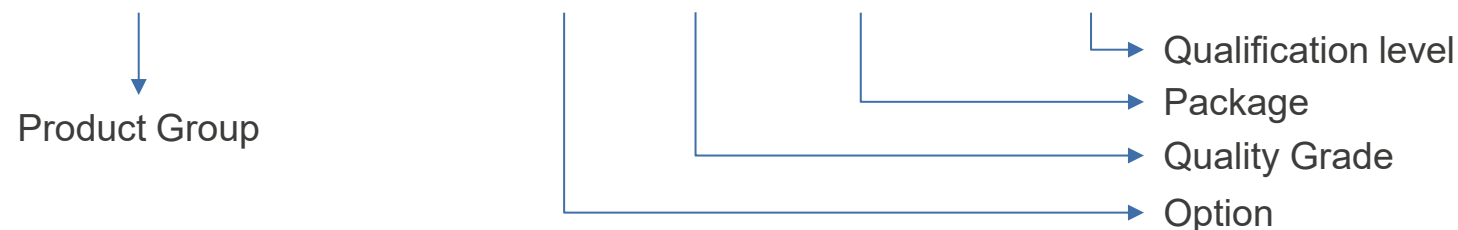
Quality Grade	
G	Standard

Package	
BG	BGA

Qualification level	
#ACn	Bulk (Tray)
#BCn	Full Carton (Tray)

RZ/V2N GROUP

R9A09G056N xx G BG #xxn



Product Group	
R9A09G056N	RZ/V2N Group

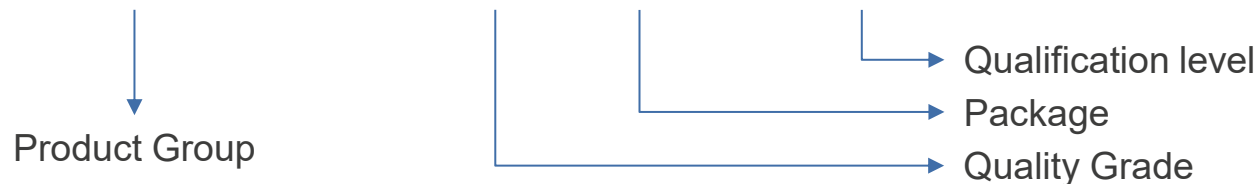
Option			
	Quad Core + Realtime CPU		(RFU)
48	Secure, ISP, GPU		
47	Secure, ISP		
46	Secure, GPU		
45	Secure		
44	non-Secure, ISP, GPU		
43	non-Secure, ISP		
42	non-Secure, GPU		
41	no ISP/GPU, non-secure		

Quality Grade	
G	Standard
Package	
BG	BGA

Qualification level	
#ACn	Bulk (Tray)
#BCn	Full Carton (Tray)

RZ/V2M GROUP

R9A09G011 G BG #xxn



Product Group

R9A09G011	RZ/V2M Group
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Quality Grade

G	Standard
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Qualification level

#ACn	Bulk (Tray)
#BCn	Full Carton (Tray)

Package

BG	BGA
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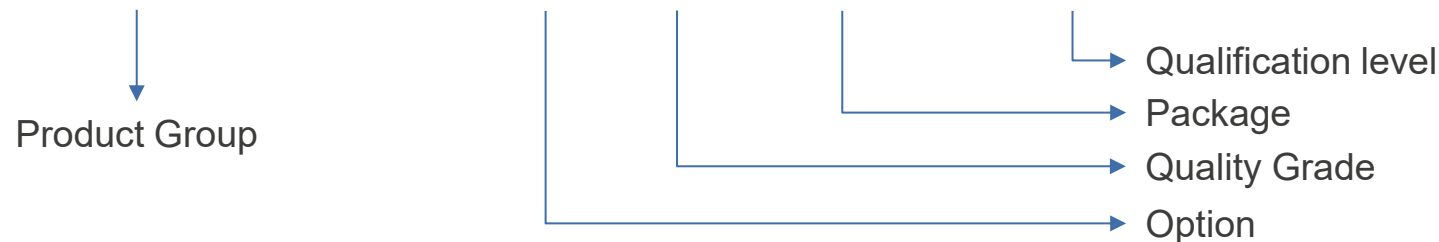
Product Group

- Qualification level
- Package
- Quality Grade
- Option



RZ/V2L GROUP

R9A07G054L xx G BG #xxn



Product Group	
R9A07G054L	RZ/V2L Group

Option			
Dual Core + sub-CPU		Single Core + sub-CPU	
28	Full-pin pkg, Secure	18	Full-pin pkg, Secure
27	Reduced-pin, Secure	17	Reduced-pin, Secure
26	(RFU)	16	(RFU)
25	(RFU)	15	(RFU)
24	Full-pin pkg, non-Secure	14	Full-pin pkg, non-Secure
23	Reduced-pin, non-Secure	13	Reduced-pin, non-Secure
22	(RFU)	12	(RFU)
21	(RFU)	11	(RFU)

Quality Grade	
G	Standard

Package	
BG	BGA

Qualification level	
#ACn	Bulk (Tray)
#BCn	Full Carton (Tray)

RZ/N SERIES

RZ/N1 GROUP

R9A06G03x x **G** xx #xxn

Product Group

Qualification level

Package

Quality grade

Option

Product Group	
R9A06G03 <u>2</u>	RZ/N1D Group
R9A06G03 <u>3</u>	RZ/N1S Group
R9A06G03 <u>4</u>	RZ/N1L Group

Option	
P	Secure, HRP/PRP
E	Secure
N	non-Secure, HRP/PRP
V	non-Secure

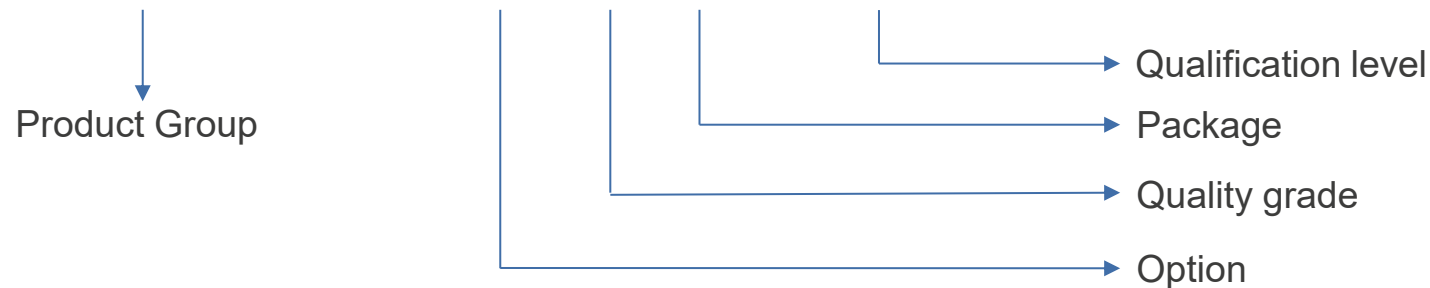
Quality Grade	
G	Standard

Qualification level	
#ACn	Bulk (Tray)
#BCn	Full Carton (Tray)

Package			
	RZ/N1D	RZ/N1S	RZ/N1L
BG	400-LFBGA	324-LFBGA	196-LFBGA
BA	324-LFBGA	196-LFBGA	196-LFBGA
BB	400 LFBGA	324 LFBGA	(RFU)
BC	324-LFBGA	196 LFBGA	196 LFBGA

RZ/N2L GROUP

R9A07G084M xx G xx #xxn



Product Group	
R9A07G084M	RZ/N2L Group

Option	
09	(RFU)
08	Secure
07	(RFU)
06	(RFU)
05	(RFU)
04	non-Secure
03	(RFU)
02	(RFU)
01	(RFU)
00	(RFU)

Quality Grade	
G	Standard

Package	
BG	225 BGA
BA	121 BGA

Qualification level	
#ACn	Bulk (Tray)
#BCn	Full Carton (Tray)

RZ/N2H GROUP

R9A09G087M xx G xx #xxn

Product Group

Qualification level

Package

Quality grade

Option

Product Group	
R9A09G087M	RZ/N2H Group

Option					
Cortex-A55 quad cores		Cortex-A55 dual cores		Cortex-A55 single core	
49	(RFU)	29	(RFU)	09	(RFU)
48	Secure	28	Secure	08	Secure
47	(RFU)	27	(RFU)	07	(RFU)
46	(RFU)	26	(RFU)	06	(RFU)
45	(RFU)	25	(RFU)	05	(RFU)
44	non-Secure	24	non-Secure	04	non-Secure
43	(RFU)	23	(RFU)	03	(RFU)
42	(RFU)	22	(RFU)	02	(RFU)
41	(RFU)	21	(RFU)	01	(RFU)
40	(RFU)	20	(RFU)	00	(RFU)

Quality Grade	
G	Standard

Package	
BG	576 FCBGA
BA	669 FCBGA

Qualification level	
#ACn	Bulk (Tray)
#BCn	Full Carton (Tray)

RZ/T SERIES

RZ/T1 GROUP

R7S910 **x** **xx** **C** **xx** **#xxn**

Product Group

Security

Option

See the next slide.

Qualification level

Package

Quality grade

Product Group	
R7S910	RZ/T1 Group

Security	
0	Non-secure
1	Secure

Quality Grade	
C	Standard

Qualification level	
#AA _n	Bulk (Tray), Sn (Tin) only
#AC _n	Bulk (Tray), SnCu and others
#BC _n	Full Carton (Tray), SnCu and others

Package	
FP	176 HLFQFP (0.4 mm pitch)
BG	320 FBGA (0.8 mm pitch)
BA	320 LFBGA (0.8 mm pitch)
BC	320 LFBGA (0.8 mm pitch)

RZ/T1 GROUP (CONT'D)

OPTION CODE



CPU		TCM	Extended SRAM							
w/R-IN Engine	600 MHz + R-IN engine (150MHz)	512KB +32KB	- (1MB for R-IN)						17	18
	450 MHz + R-IN engine (150MHz)	512KB +32KB	- (1MB for R-IN)						15	16
Single core	600 MHz	512KB +32KB	1MB		07	13	27	28		
	450 MHz	512KB +32KB	1MB		06		25	26		
			0KB	04	02	11				
	300 MHz	512KB +32KB	0KB				35	36		
Package				176 QFP	320 BGA	320 BGA	320 BGA	320 BGA	320 BGA	320 BGA
Encoder Interface				-	Yes	-	Yes	-	Yes	
Industrial Ethernet				- (Standard Ethernet)			EtherCAT		Multi protocol	

RZ/T2M, T2ME GROUP

R9A07G075M xx G xx #xxn

Product Group

Qualification level

Package

Quality grade

Option

Product Group	
R9A07G075M	RZ/T2M, RZ/T2ME Group *

Option			
Dual core		Single core	
29	CAN-FD, Secure, OTFD	09	(RFU)
28	CAN-FD, Secure	08	CAN-FD, Secure
27	CAN-FD, non-Ether, Secure	07	(RFU)
26	Classical CAN, Secure	06	Classical CAN, Secure
25	(RFU)	05	Classical CAN, non-Ether, Secure
24	CAN-FD, non-Secure	04	CAN-FD, non-Secure
23	(RFU)	03	(RFU)
22	Classical CAN, non-Secure	02	Classical CAN, non-secure
21	Classical CAN, non-Ether, non-Secure	01	Classical CAN, non-Ether, non-Secure
20	(RFU)	00	(RFU)

Quality Grade	
G	Standard

Package	
BG	320 BGA
BA	225 BGA
FP	176 QFP
FA	128 QFP

Qualification level	
#AA _n , #AC _n	Bulk (Tray)
#BA _n , #BC _n	Full Carton (Tray)

*: If the option (RZ/T2M, RZ/T2ME group) is 29, the group name will be RZ/T2ME.
Otherwise, it will be RZ/T2M.

RZ/T2L GROUP

R9A07G074M xx G xx #xxn

Product Group

Qualification level

Package

Quality grade

Option

Product Group	
R9A07G074M	RZ/T2L Group

Option	
09	(RFU)
08	CAN-FD, EtherCAT, Secure
07	(RFU)
06	(RFU)
05	Classical CAN, non-EtherCAT, Secure
04	CAN-FD, EtherCAT, non-Secure
03	(RFU)
02	(RFU)
01	Classical CAN, non-EtherCAT, non-Secure
00	(RFU)

Quality Grade	
G	Standard

Package	
BG	196 BGA, 12mm body, 0.8mm pitch
BA	196 BGA, 10mm body, 0.65mm pitch

Qualification level	
#ACn	Bulk (Tray)
#BCn	Full Carton (Tray)

RZ/T2H GROUP

R9A09G077M xx G BG #xxn

Product Group

Qualification level

Package

Quality grade

Option

Product Group	
R9A09G077M	RZ/T2H Group

Option					
Cortex-A55 quad cores		Cortex-A55 dual cores		Cortex-A55 single core	
49	(RFU)	29	(RFU)	09	(RFU)
48	Secure	28	Secure	08	Secure
47	(RFU)	27	(RFU)	07	(RFU)
46	(RFU)	26	(RFU)	06	(RFU)
45	(RFU)	25	(RFU)	05	(RFU)
44	non-Secure	24	non-Secure	04	non-Secure
43	(RFU)	23	(RFU)	03	(RFU)
42	(RFU)	22	(RFU)	02	(RFU)
41	(RFU)	21	(RFU)	01	(RFU)
40	(RFU)	20	(RFU)	00	(RFU)

Quality Grade	
G	Standard

Package	
BG	729 FCBGA

Qualification level	
#ACn	Bulk (Tray)
#BCn	Full Carton (Tray)

RZ/G SERIES

RZ/G3L GROUP

R9A09G046L xx G BG #xxn

Product Group

Qualification level
Package
Quality Grade
Option

Product Group		Option				Quality Grade		Qualification level	
R9A09G046L	RZ/G3L Group	Quad Core +subCPU		Dual Core +subCPU		G	Standard	#ACn	Bulk (Tray)
		48	17x17mm package, Secure	28	17x17mm package, Secure			#BCn	Full Carton (Tray)
		46	14x14mm package, Secure	26	14x14mm package, Secure				
						Package			
						BG	LFBGA		

RZ/G3SE GROUP

R9A09G045SE x G BG #xxn

Product Group

Qualification level
Package
Quality Grade
Option

Product Group		Option				Quality Grade		Qualification level	
R9A09G045SE	RZ/G3SE Group	Quad Core +subCPU		Dual Core +subCPU		G	Standard	#ACn	Bulk (Tray)
		8	17x17mm package, Secure	7	17x17mm package, Secure			#BCn	Full Carton (Tray)
		6	14x14mm package, Secure	5	14x14mm package, Secure				
						Package			
						BG	LFBGA		

RZ/G3E GROUP

R9A09G047E xx G BG #xxn

Product Group

Qualification level
Package
Quality Grade
Option

Product Group		Option				Quality Grade		Qualification level	
R9A09G047E	RZ/G3E Group	Quad Core +subCPU		Dual Core +subCPU		G	Standard	#ACn	Bulk (Tray)
		57	15x15mm package, NPU, Secure	37	15x15mm package, NPU, Secure			#BCn	Full Carton (Tray)
		47	15x15mm package, Secure	27	15x15mm package, Secure	Package			
		58	21x21mm package, NPU, Secure	38	21x21mm package, NPU, Secure	BG	FCBGA		
		48	21x21mm package, Secure	28	21x21mm package, Secure				

RZ/G3S GROUP

R9A08G045S xx G BG #xxn

Product Group

Qualification level
Package
Quality Grade
Option

Product Group		Option				Quality Grade		Qualification level	
R9A08G045S	RZ/G3S Group	37	Secure, PCIe,2x Cortex-M33, 14mmBGA	17	Secure,PCIe,1x Cortex-M33, 14mmBGA	G	Standard	#ACn	Bulk (Tray)
		36	(RFU)	16	(RFU)				
		35	Secure,2x Cortex-M33, 13mmBGA	15	Secure,1x Cortex-M33, 13mmBGA	Package		#BCn	Full Carton (Tray)
		34	(RFU)	14	(RFU)				
		33	Non-Secure,PCIe,2x Cortex-M33, 14mmBGA	13	Non-Secure,PCIe, 1x Cortex-M33, 14mmBGA	BG	LFBGA		
		32	(RFU)	12	(RFU)				
		31	Non-Secure,2x Cortex-M33, 13mmBGA	11	Non-Secure,1x Cortex-M33, 13mmBGA				
		30	(RFU)	10	(RFU)				

RZ/G2L GROUP

R9A07G04xx xx G BG #xxn

Product Group

Qualification level

Package

Quality Grade

Option

Product Group		Option						Quality Grade		Qualification level	
R9A07G044L	RZ/G2L Group	Dual Core +subCPU		Single Core +subCPU		Single Core		G	Standard	#ACn	Bulk (Tray)
R9A07G044C	RZ/G2LC Group	28	Full-pin pkg, Secure	18	(RFU)	08	(RFU)	BG	LFBGA	#BCn	Full Carton (Tray)
R9A07G043U	RZ/G2UL Group	27	Reduced-pin, Secure	17	(RFU)	07	(RFU)				
R9A07G043F	RZ/Five Group	26	Small pkg, Secure	16	(RFU)	06	(RFU)				
		25	(RFU)	15	Smaller pkg, Secure	05	Smaller pkg, Secure				
		24	Full-pin pkg, non-Secure	14	(RFU)	04	(RFU)				
		23	Reduced-pin, non-Secure	13	(RFU)	03	(RFU)				
		22	Small pkg, non-Secure	12	(RFU)	02	(RFU)				
		21	(RFU)	11	Smaller pkg, non-Secure	01	Smaller pkg, non-Secure				

RZ/G2 GROUP

R8A774**x** **x** **HA** **xx** **xx** **#xn**

Product Group

Qualification level
Package
Option
Quality Grade
HDMI Support

Product Group		HDMI Support		Quality Grade		Option		Package		Qualification level	
R8A774 E	RZ/G2H Group	0	HDMI OFF	HA	Standard	01	Standard	BG	FCBGA	#Un	Bulk (Tray)
R8A774 A	RZ/G2M Group	1	HDMI ON			02	Option1	BN	FCBGA w/ LID	#Gn	Full Carton (Tray)
R8A774 B	RZ/G2N Group	2	HDMI OFF								
R8A774 C	RZ/G2E Group	3	HDMI ON								

RZ/G1 GROUP

R8A774x0 HA 02 BG #UA

Product Group

Fixed
Package
Option
Quality Grade

Product Group		Quality Grade		Option		Package	
R8A77420	RZ/G1H Group	HA	Standard	02	Platform Support	BG	FCBGA
R8A77430	RZ/G1M Group						
R8A77440	RZ/G1N Group						
R8A77450	RZ/G1E Group						
R8A77470	RZ/G1C Group						

RZ/A SERIES

RZ/A1H GROUP

R7S72100 x V x xx #xx n

Product Group

- Factory
- Packaging, Material(Pb-free)
- Package, Pin count, Pin pitch
- Quality Grade
- Temperature
- Pin count

Product Group

R7S72100	RZ/A1H (10MB) Group
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Pin count

0	256 pin
1	324 pin

Temperature

V	-40°C to 85°C
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Quality Grade

L	High quality
C	Standard

Package, Pin count, Pin pitch

FP	LFQFP, 256 pin, 0.4 mm
BG	FBGA, 324 pin, 0.8 mm
BG	LFBGA, 256 pin, 0.5 mm

Packaging, Material(Pb-free)

AA	Bulk (Tray), Sn (Tin) only
AC	Bulk (Tray), SnCu and others
BA	Full Carton (Tray), Sn (Tin) only
BC	Full Carton (Tray), SnCu and others

Factory

0	RENESAS Naka Factory
1	TSMC

RZ/A1M GROUP

R7S72101 x V x xx #xx 0

Product Group

- Fixed
- Packaging, Material(Pb-free)
- Package, Pin count, Pin pitch
- Quality Grade
- Temperature
- Pin count

Product Group

R7S72101	RZ/A1M (5MB) Group
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Pin count

0	256 pin
1	324 pin

Temperature

V	-40°C to 85°C
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Quality Grade

L	High quality
C	Standard

Package, Pin count, Pin pitch

FP	LFQFP, 256 pin, 0.4 mm
BG	FBGA, 324 pin, 0.8 mm
BG	LFBGA, 256 pin, 0.5 mm

Packaging, Material(Pb-free)

AA	Bulk (Tray), Sn (Tin) only
AC	Bulk (Tray), SnCu and others

RZ/A1L GROUP

R7S72102 x V x xx #xx 1

Product Group

- Fixed
- Packaging, Material(Pb-free)
- Package, Pin count, Pin pitch
- Quality Grade
- Temperature
- Pin count

Product Group

R7S72102	RZ/A1L (3MB) Group
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Pin count

0	176 pin
1	208 pin

Temperature

V	-40°C to 85°C
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Quality Grade

L	High quality
C	Standard

Package, Pin count, Pin pitch

FP	LFQFP, 176 pin, 0.5 mm
FP	LFQFP, 208 pin, 0.5 mm
BG	LFBGA, 176 pin, 0.5 mm

Packaging, Material(Pb-free)

AA	Bulk (Tray), Sn (Tin) only
AC	Bulk (Tray), SnCu and others
BA	Full Carton (Tray), Sn (Tin) only
BC	Full Carton (Tray), SnCu and others

RZ/A1LU GROUP, RZ/A1LC GROUP

R7S72103 x V x xx #xx 0

Product Group

- Fixed
- Packaging, Material(Pb-free)
- Package, Pin count, Pin pitch
- Quality Grade
- Temperature
- Pin count

Product Group	
R7S72103	RZ/A1LU (3MB) Group, RZ/A1LC (2MB) Group

Temperature	
V	-40°C to 85°C

Quality Grade	
L	High quality
C	Standard

Package, Pin count, Pin pitch	
FP	LFQFP, 176 pin, 0.5 mm
FP	LFQFP, 208 pin, 0.5 mm
BG	LFBGA, 176 pin, 0.5 mm
BG	FBGA, 233 pin, 0.8 mm

Packaging, Material(Pb-free)	
AA	Bulk (Tray), Sn (Tin) only
AC	Bulk (Tray), SnCu and others

Pin count	
0	RZ/A1LU (3MB), 176 pin
1	RZ/A1LU (3MB), 208 pin (QFP) / 233 pin (BGA)
4	RZ/A1LC (2MB), 176 pin

RZ/A2M GROUP

R7S92104 x V x xx #xx 0

Product Group

- Fixed
- Packaging, Material(Pb-free)
- Package, Pin count, Pin pitch
- Quality Grade
- Temperature
- Pin count

Product Group	
R7S92104	RZ/A2M (4MB) w/o DRP
R7S92105	RZ/A2M (4MB) w/ DRP

w/o DRP only

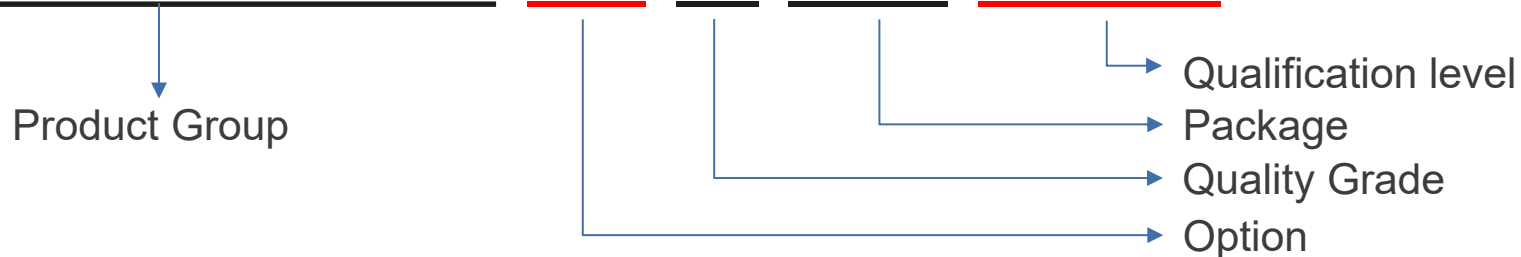
Pin count		
0	176 pin	General product (Non secure)
1	256 pin	
2	272 pin	
3	324 pin	
5	176 pin	Secure product
6	256 pin	
7	272 pin	
8	324 pin	

Temperature	
V	-40°C to 85°C

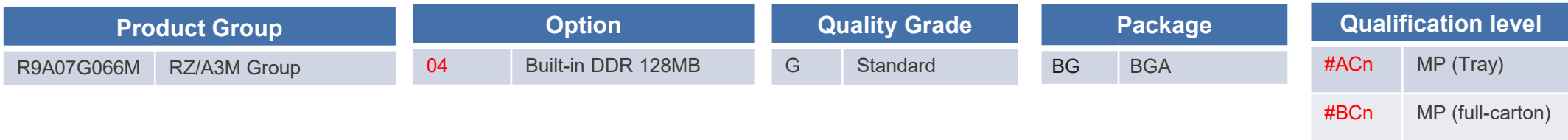
Quality Grade	
L	High quality
C	Standard

Package, Pin count, Pin pitch	
FP	LFQFP, 176 pin, 0.5 mm
FP	LFQFP, 208 pin, 0.5 mm
BG	LFBGA, 176 pin, 0.5 mm
BG	FBGA, 233 pin, 0.8 mm

Packaging, Material(Pb-free)	
AA	Bulk (Tray), Sn (Tin) only
AC	Bulk (Tray), SnCu and others



Product Group		Option		Quality Grade		Package		Qualification level	
R9A07G063U	RZ/A3UL Group	02	DDR I/F	HA	Standard	BG	BGA	#ACn	MP (Tray)
								#BCn	MP (full-carton)



[Renesas.com](https://www.renesas.com)