

RENESAS RZ FAMILY

PRODUCT PART NUMBER GUIDE

MARCH 2026 (REV 2.5)

EMBEDDED PROCESSING MARKETING DIVISION
RENESAS ELECTRONICS CORPORATION

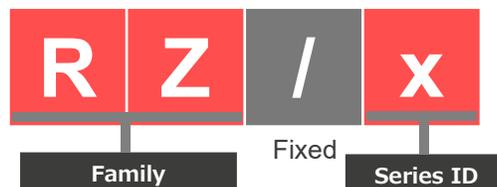


NOMENCLATURE OVERVIEW

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

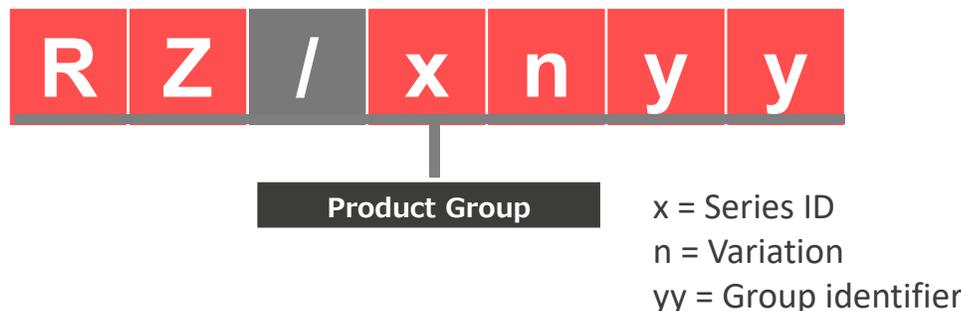
- Series Name: (RZ + "/" + 1 digit)

- 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



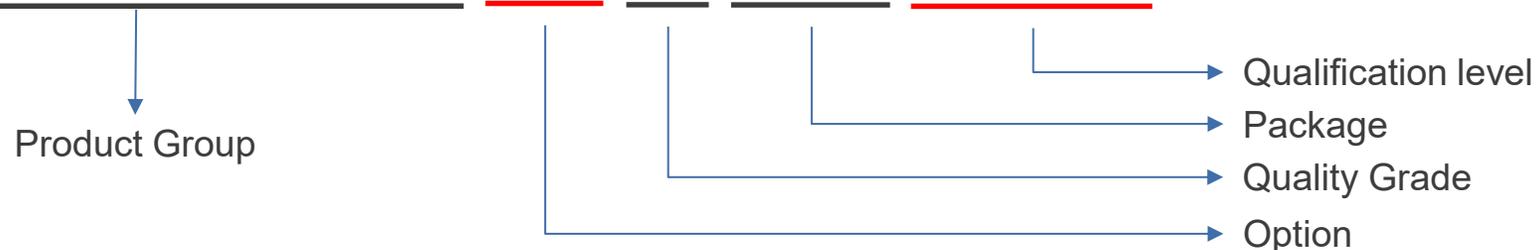
*RZ/G is originally for graphics application but now expands to IoT Edge application w/o graphics.

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
	L	Low-end
RZ/T	M	Mid-range
	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
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

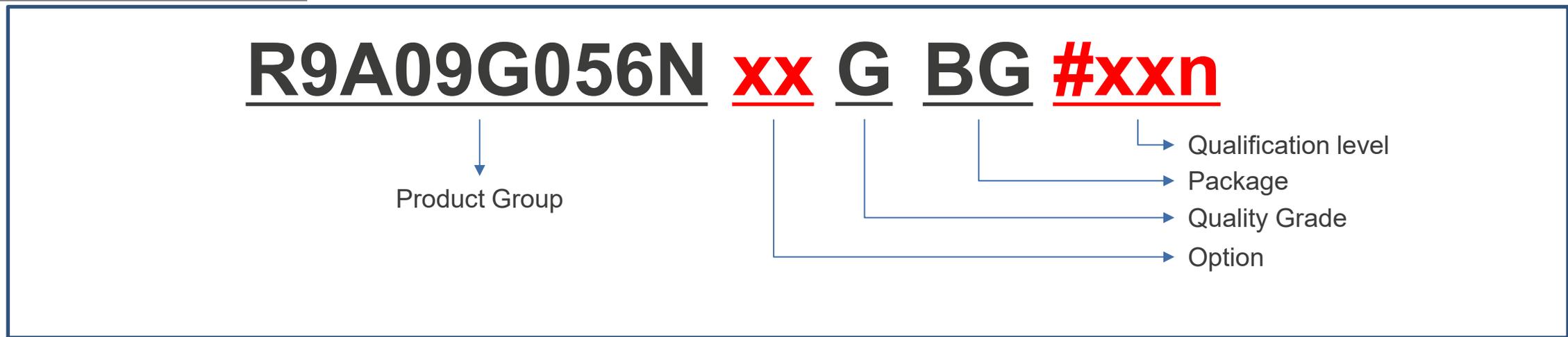
Option	
	Quad Core + Realtime CPU (RFU)
48	ISP and GPU, Secure
47	(RFU)
46	GPU only, Secure
45	no ISP/GPU, Secure
44	ISP and GPU, non-secure
43	(RFU)
42	GPU only, non-secure
41	no ISP/GPU, non-secure

Quality Grade	
G	Standard

Package	
BG	BGA

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

RZ/V2N GROUP



Product Group	
R9A09G056N	RZ/V2N Group

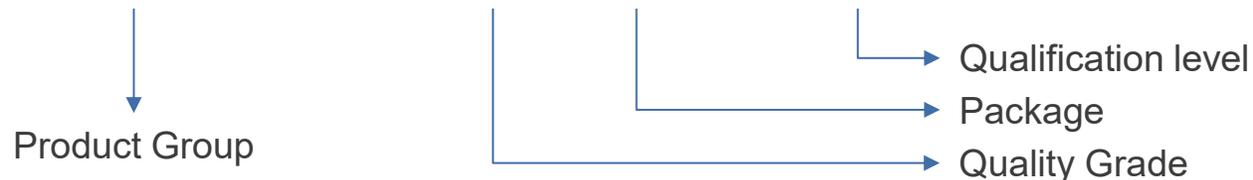
Option	
	Quad Core + Realtime CPU (RFU)
48	Secure, ISP, GPU
47	Secure, ISP
46	Secure, GPU
45	Secure
44	non-Secure, ISP, GPU
43	non-Secure, ISP
42	non-Secure, GPU
41	no ISP/GPU, non-secure

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

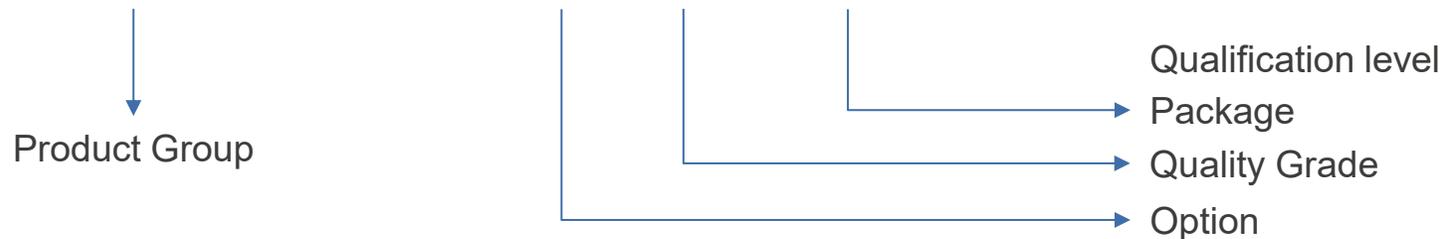
Quality Grade	
G	Standard

Package	
BG	BGA

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

RZ/V2MA GROUP

R9A09G055M A3 G BG #xxn

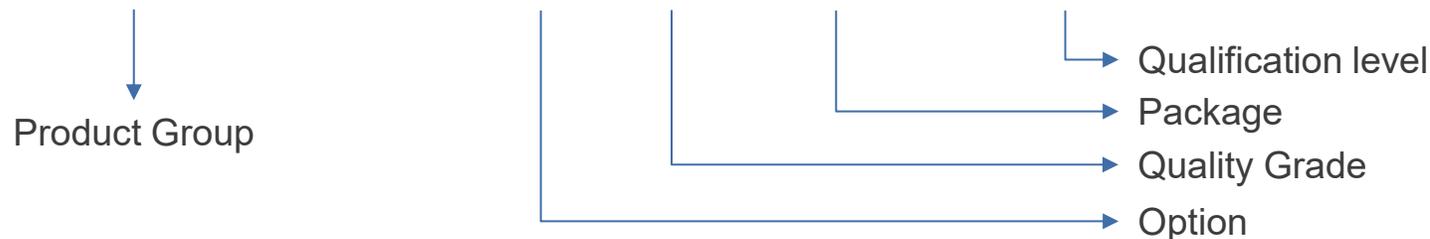


Product Group		Option		Quality Grade		Qualification level	
R9A09G055M	RZ/V2MA Group	Dual Core		G	Standard	#ACn	Bulk (Tray)
		A3	full-spec, non-secure			#BCn	Full Carton (Tray)

Package	
BG	BGA

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

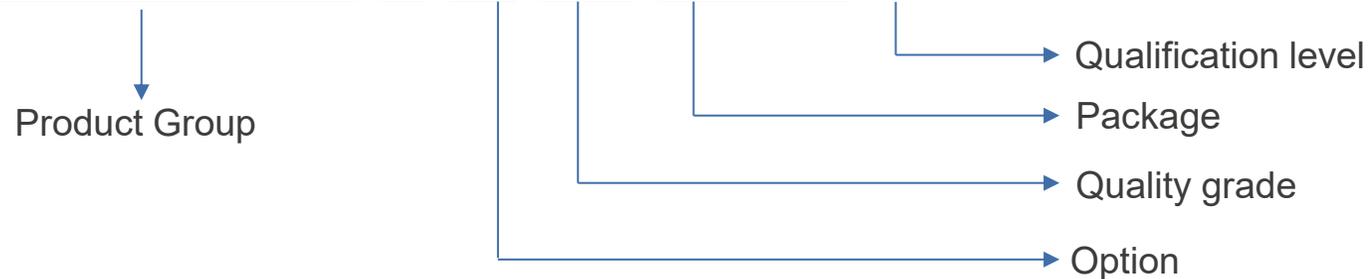
Package	
BG	BGA

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

RZ/N SERIES

RZ/N1 GROUP

R9A06G03x x **G** xx #xxn



Product Group	
R9A06G032	RZ/N1D Group
R9A06G033	RZ/N1S Group
R9A06G034	RZ/N1L Group

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

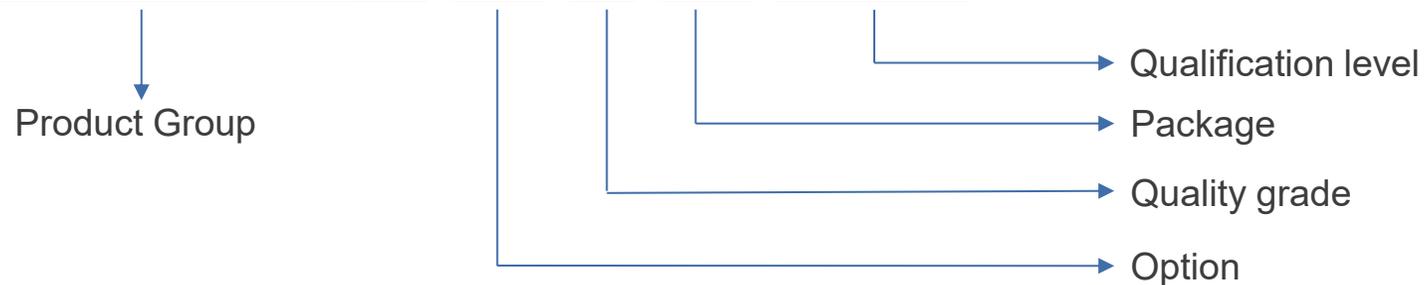
Quality Grade	
G	Standard

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	(RFU)

RZ/N2L GROUP

R9A07G084M xx G xx #xxn



Product Group	
R9A07G084M	RZ/N2L Group

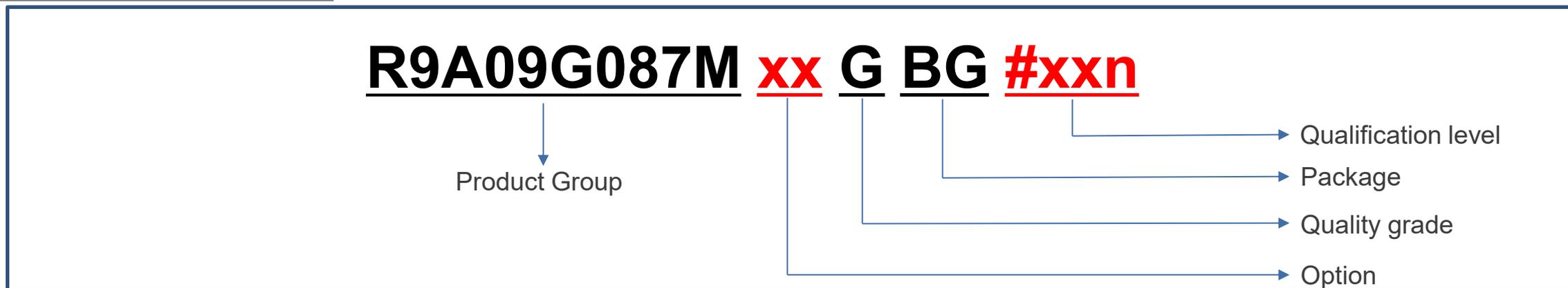
Option	
09	(RFU)
08	Secure
07	(RFU)
06	(RFU)
05	(RFU)
04	non-Secure
03	(RFU)
02	(RFU)
01	(RFU)
00	(RFU)

Quality Grade	
G	Standard

Package	
BG	225 BGA
BA	121 BGA

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

RZ/N2H GROUP



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

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

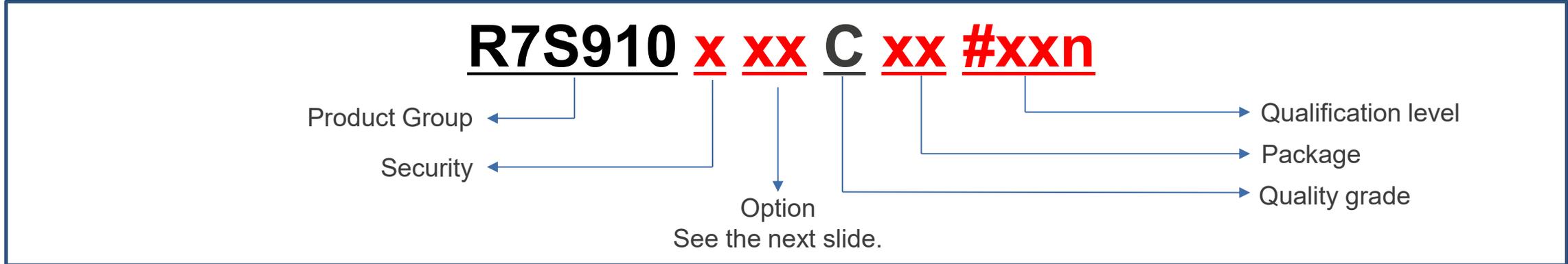
RZ/T SERIES

RZ/T1 GROUP



Security

0	Non-secure
1	Secure



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)

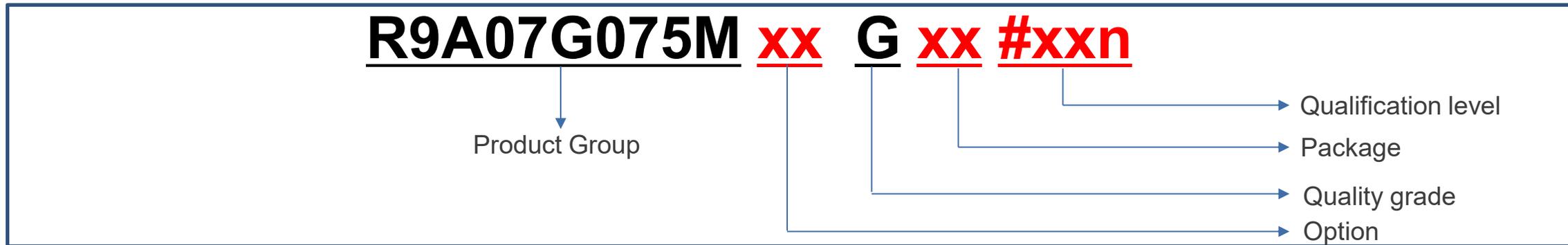
RZ/T1 GROUP (CONT'D)

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	01	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



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

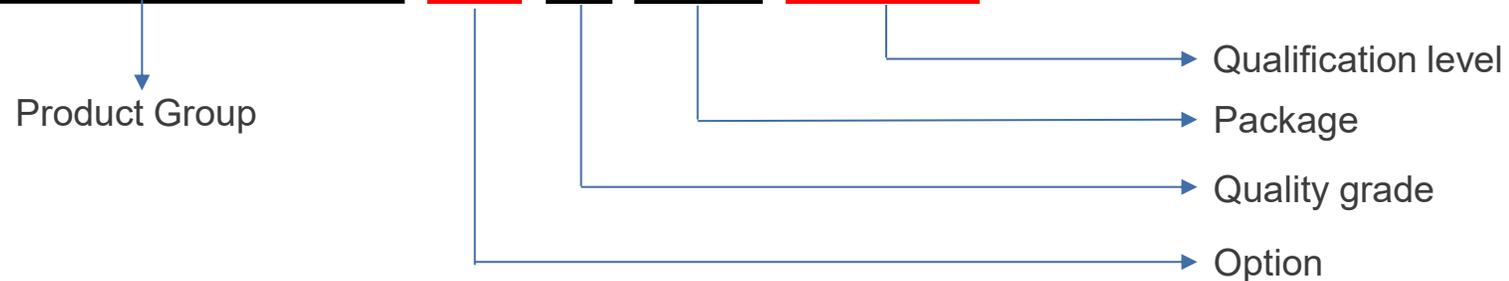
Package	
BG	320 BGA
BA	225 BGA
FP	176 QFP
FA	128 QFP

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 BG #xxn



Product Group	
R9A07G074M	RZ/T2L Group

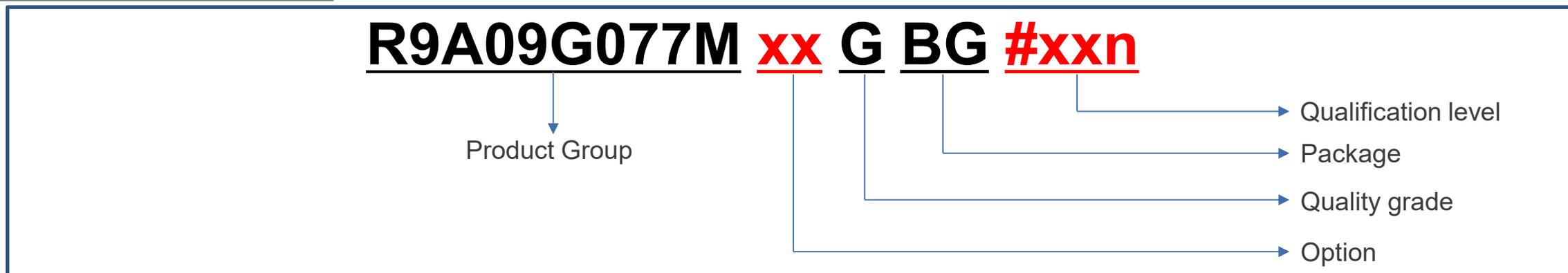
Option	
09	(RFU)
08	CAN-FD, EtherCAT, Secure
07	(RFU)
06	(RFU)
05	Classical CAN, non-EtherCAT, Secure
04	CAN-FD, EtherCAT, non-Secure
03	(RFU)
02	(RFU)
01	Classical CAN, non-EtherCAT, non-Secure
00	(RFU)

Quality Grade	
G	Standard

Package	
BG	196 BGA

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

RZ/T2H GROUP



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/G3S GROUP

R9A08G045S xx G BG #xxn

Product Group

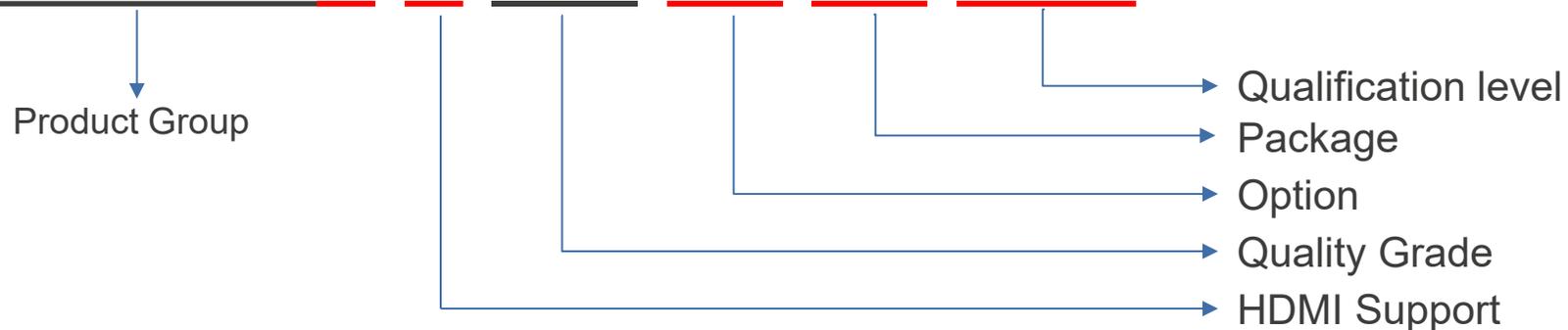
Qualification level
 Package
 Quality Grade
 Option

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)			#BCn	Full Carton (Tray)
		35	Secure, 2x Cortex-M33, 13mmBGA	15	Secure, 1x Cortex-M33, 13mmBGA				
		34	(RFU)	14	(RFU)				
		33	Non-Secure, PCIe, 2x Cortex-M33, 14mmBGA	13	Non-Secure, PCIe, 1x Cortex-M33, 14mmBGA				
		32	(RFU)	12	(RFU)				
		31	Non-Secure, 2x Cortex-M33, 13mmBGA	11	Non-Secure, 1x Cortex-M33, 13mmBGA				
		30	(RFU)	10	(RFU)				

Package	
BG	LFBGA

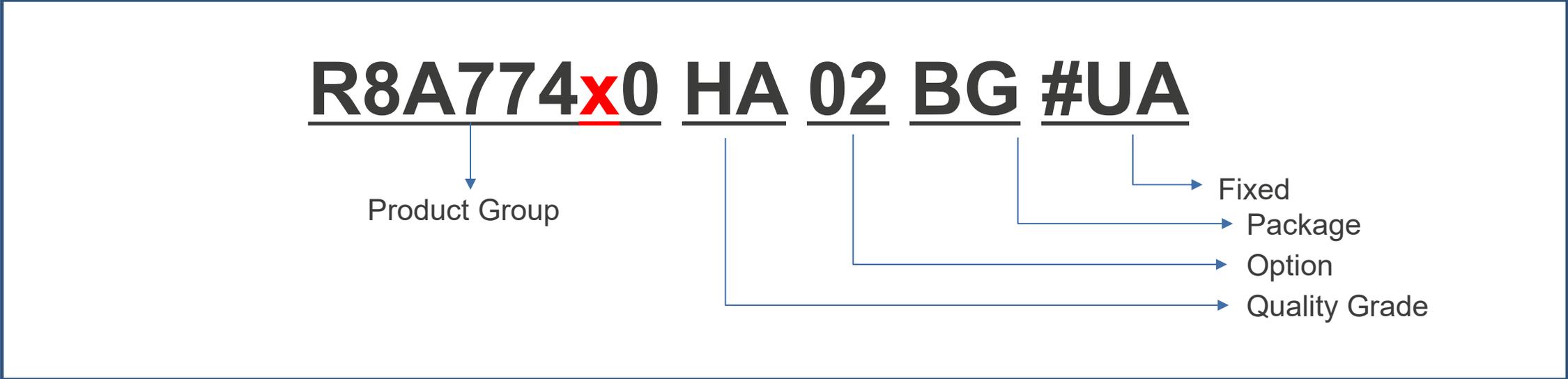
RZ/G2 GROUP

R8A774x x **HA** xx xx #xn



Product Group		HDMI Support		Quality Grade		Option		Package		Qualification level	
R8A774E	RZ/G2H Group	0	HDMI OFF	HA	Standard	01	Standard	BG	FCBGA	#Un	Bulk (Tray)
R8A774A	RZ/G2M Group	1	HDMI ON			02	Option1	BN	FCBGA w/ LID	#Gn	Full Carton (Tray)
R8A774B	RZ/G2N Group	2	HDMI OFF								
R8A774C	RZ/G2E Group	3	HDMI ON								

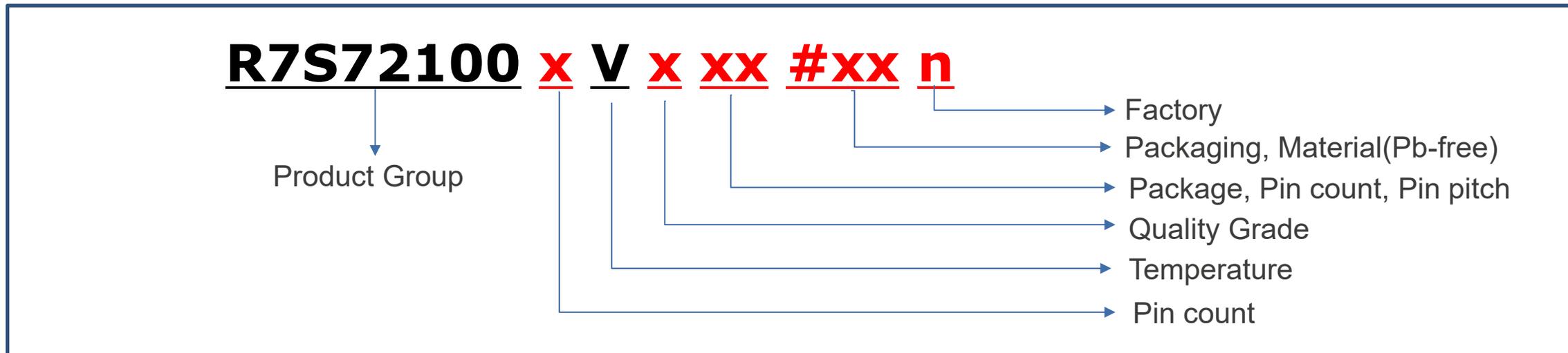
RZ/G1 GROUP



Product Group		Quality Grade		Option		Package	
R8A774 2 0	RZ/G1H Group	HA	Standard	02	Platform Support	BG	FCBGA
R8A774 3 0	RZ/G1M Group						
R8A774 4 0	RZ/G1N Group						
R8A774 5 0	RZ/G1E Group						
R8A774 7 0	RZ/G1C Group						

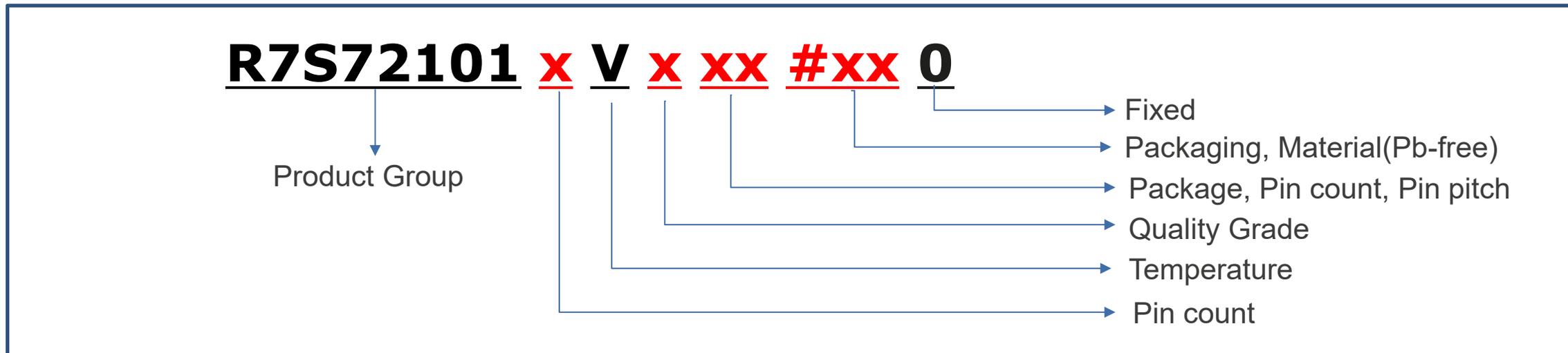
RZ/A SERIES

RZ/A1H GROUP



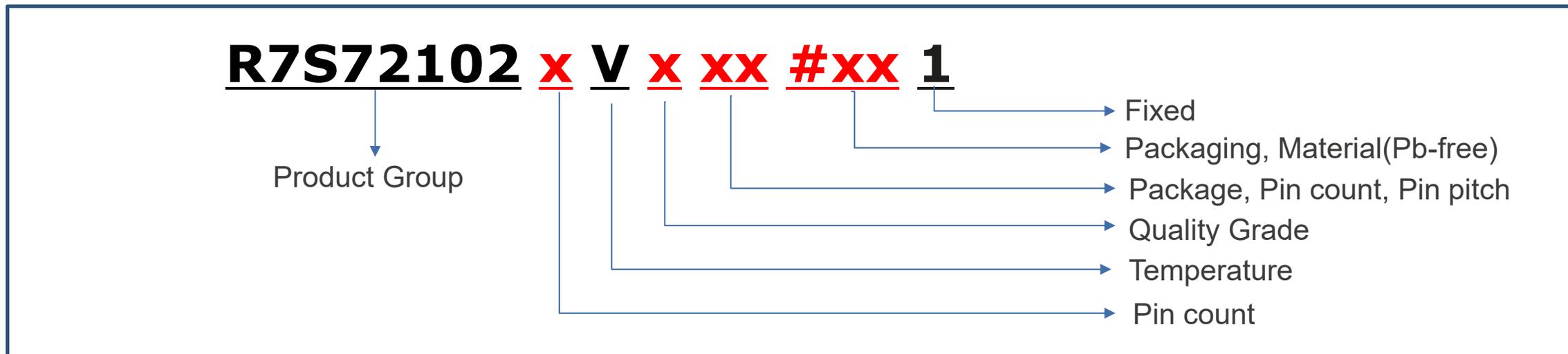
Product Group		Pin count		Temperature		Quality Grade		Package, Pin count, Pin pitch		Packaging, Material(Pb-free)	
R7S72100	RZ/A1H (10MB) Group	0	256 pin	V	-40°C to 85°C	L	High quality	FP	LFQFP, 256 pin, 0.4 mm	AA	Bulk (Tray), Sn (Tin) only
		1	324 pin			C	Standard	BG	FBGA, 324 pin, 0.8 mm	AC	Bulk (Tray), SnCu and others
								BG	LFBGA, 256 pin, 0.5 mm	BA	Full Carton (Tray), Sn (Tin) only
										BC	Full Carton (Tray), SnCu and others
Factory											
										0	RENESAS Naka Factory
										1	TSMC

RZ/A1M GROUP



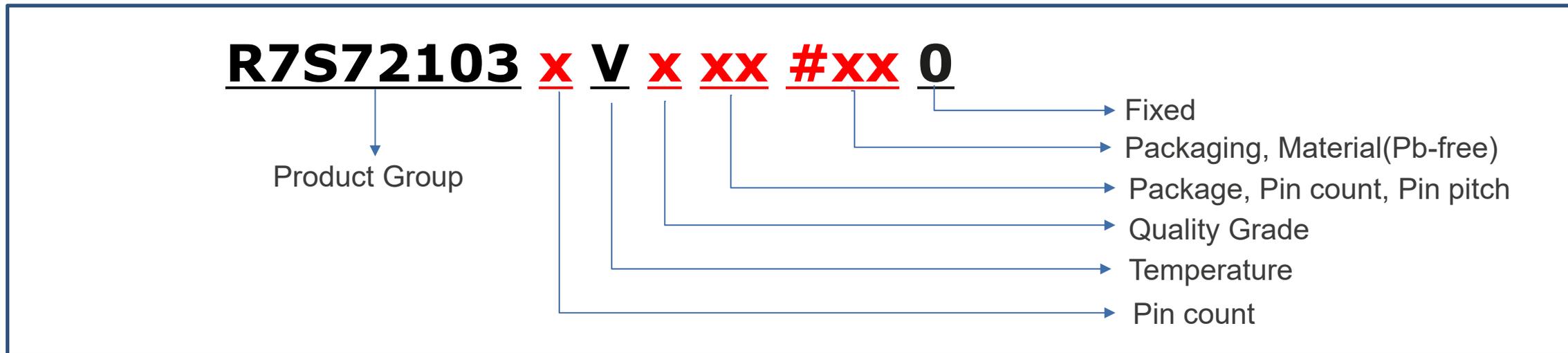
Product Group		Pin count		Temperature		Quality Grade		Package, Pin count, Pin pitch		Packaging, Material(Pb-free)	
R7S72101	RZ/A1M (5MB) Group	0	256 pin	V	-40°C to 85°C	L	High quality	FP	LFQFP, 256 pin, 0.4 mm	AA	Bulk (Tray), Sn (Tin) only
		1	324 pin			C	Standard	BG	FBGA, 324 pin, 0.8 mm	AC	Bulk (Tray), SnCu and others
								BG	LFBGA, 256 pin. 0.5 mm		

RZ/A1L GROUP



Product Group		Pin count		Temperature		Quality Grade		Package, Pin count, Pin pitch		Packaging, Material(Pb-free)	
R7S72102	RZ/A1L (3MB) Group	0	176 pin	V	-40°C to 85°C	L	High quality	FP	LFQFP, 176 pin, 0.5 mm	AA	Bulk (Tray), Sn (Tin) only
		1	208 pin			C	Standard	FP	LFQFP, 208 pin, 0.5 mm	AC	Bulk (Tray), SnCu and others
								BG	LFBGA, 176 pin, 0.5 mm	BA	Full Carton (Tray), Sn (Tin) only
										BC	Full Carton (Tray), SnCu and others

RZ/A1LU GROUP, RZ/A1LC GROUP



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

Temperature	
V	-40°C to 85°C

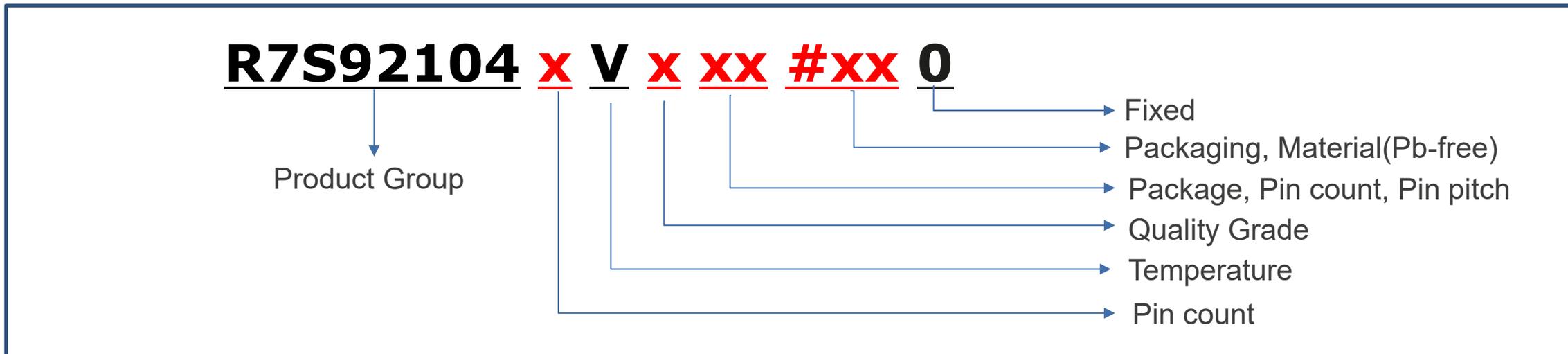
Quality Grade	
L	High quality
C	Standard

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



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	

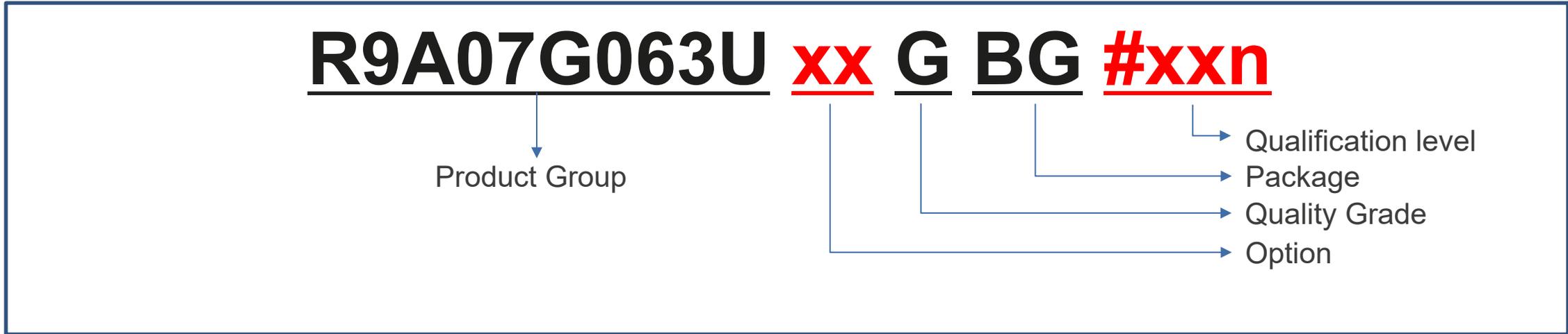
Temperature	
V	-40°C to 85°C

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

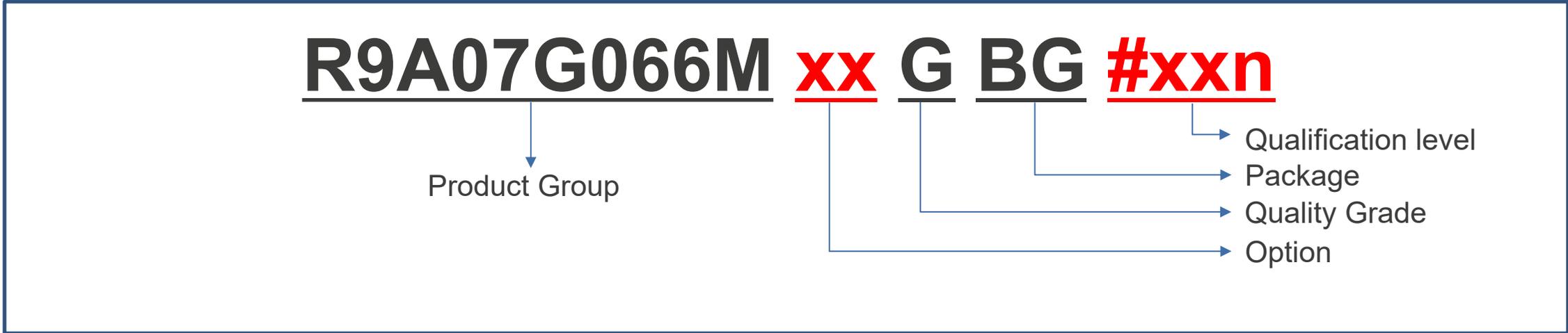
Packaging, Material(Pb-free)	
AA	Bulk (Tray), Sn (Tin) only
AC	Bulk (Tray), SnCu and others

RZ/A3UL GROUP



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)

RZ/A3M GROUP



Product Group		Option		Quality Grade		Package		Qualification level	
R9A07G066M	RZ/A3M Group	04	Built-in DDR 128MB	G	Standard	BG	BGA	#ACn	MP (Tray)
								#BCn	MP (full-carton)

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