RH850 FAMILY GEN2 PRODUCT PART NUMBER

2/APRIL/2026
RENESAS ELECTRONICS CORPORATION
REV 1.00

RH850/U2AX MATERIAL CODE NOMENCLATURE (1/2)

R7 F 70 23 00A F A BB -C#YJ1

MCU

R	Renesas
7	MCU (high)
F	Flash
70	RH850

Generation/ Series

23	U2Ax
2Z	U2Ax EVA/Calibrtn. Chip
25	U2Bx

Device

xxx	Device specific number*

Temperature

E	Tj = -40 to + 150°C
F	Tj = -40 to + 160°C

AEC-Q100

A	Automotive Grade 0
B	Automotive Grade 1

* for details, please refer to the next page

Material/ Version

	Packaging
#Axx	Tray (split tray for samples)
#Bxx	Tray (full carton)
#Hxx	T&R
	Plating
#xAx	Pb free/ Sn plating (HLQFP)
#xCx	Pb free/ (BGA)
	Sample Versions
#YJx	WS = Working Sample
#YKx	ES = Engineering Sample
#YBx	CS = Commercial Sample
	Product Version
#xxx	x = 1, 2, 3,….

Bonding

-C	Cu wire bonding

Package

BC	Please refer to next page for details.
BG	
BA	
BB	
BD	
FK	
FM	

RH850/U2AX MATERIAL CODE NOMENCLATURE (2/2)

R7 F 70 23 00A F A BB -C#YJ1

MCU

R	Renesas
7	MCU (high)
F	Flash
70	RH850

Device

00	U2A16 V1.0*
00A	U2A16 V1.1*
00B	U2A16 V1.2
01	U2A8 V1.0*
01A	U2A8 V1.1*
01B	U2A8 V1.2
02	U2A6 V1.0
19A	U2A-EVA V1.1*
19B	U2A-EVA V1.2

U2A6 Package

BB	BGA	292pin	0.8mm
BD	BGA	156pin	0.7mm
FK	QFP	176pin	0.5/0.4mm
FM	QFP	144pin	0.5/0.4mm

U2A8 Package

BA	BGA	373pin	0.8mm
BG	BGA	292pin	0.8mm

U2A16 & EVA Package

BC	BGA C	516pin	0.8mm
BG	BGA D	516pin	0.8mm
BA	BGA	292pin	0.8mm
BB	BGA	373pin	0.8mm

Note * : As sales of these products is limited, please contact your sales representative first when considering these products for purchasing and project development.

RH850/U2BX MATERIAL CODE NOMENCLATURE

R7 F 70 25 46A F A BB -C#YJ2

MCU

R	Renesas
7	MCU (high)
F	Flash
70	RH850

Application

10	F1x
12	E1x, C1x
13	P1x
14	D1x
15/16	F1x
23	U2Ax
25	U2Bx
26	U2Cx

Device

xxx	Device specific number

Temperature

3	Ta = -40 to + 105°C
4	Ta = -40 to + 125°C
F	Tj = -40 to + 160°C

A	Automotive

Material/ Version

	Packaging
#Axx	Tray
#Kxx	T&R QFP (top right, formerly -E3)
#Hxx	T&R BGA (top left, formerly -E2)
	Plating
#xAx	Pb free/ Sn plating
#xCx	Pb free/
	Sample Versions
#Yxx	Sample
#YJx	WS = Working Sample
#YKx	ES = Engineering Sample
#YBx	CS = Commercial Sample
	Product Version
#xxx	x = 1, 2, 3,….

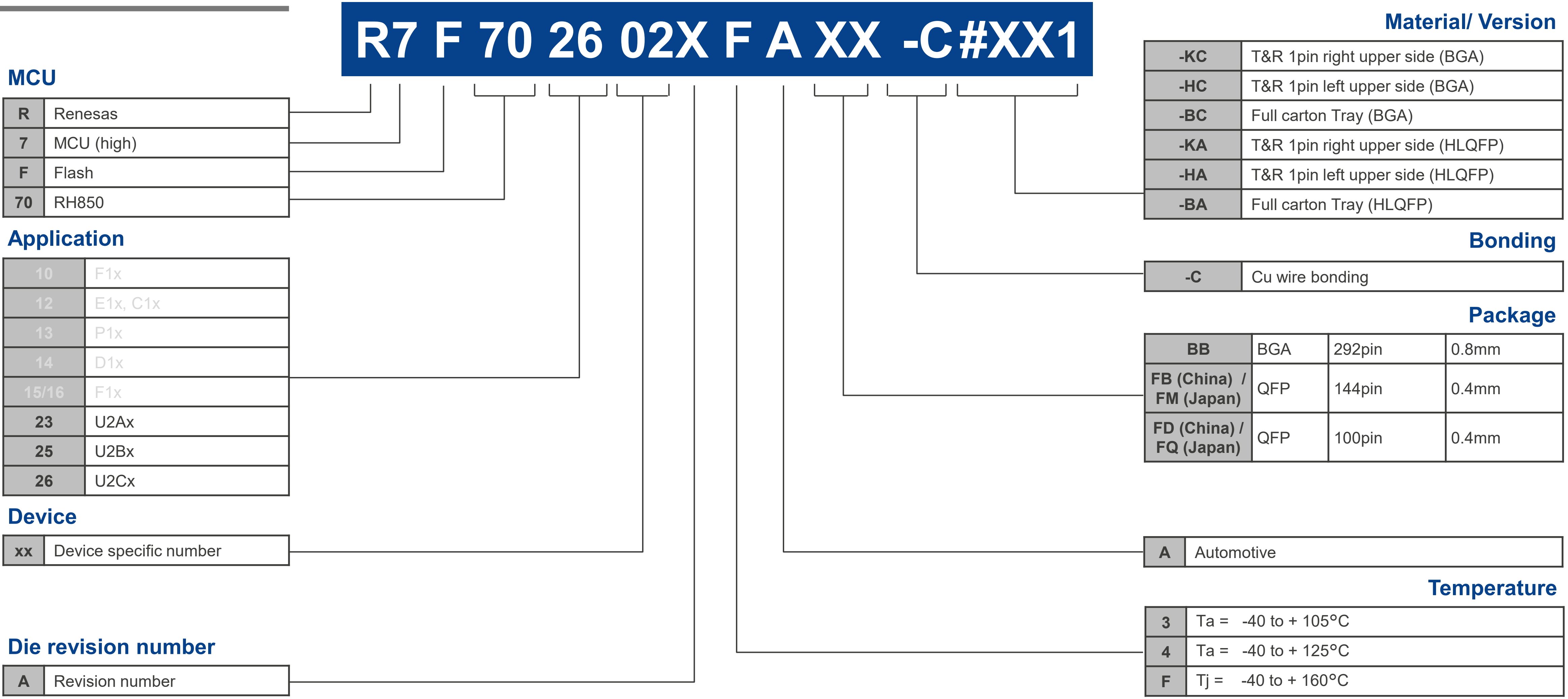
Bonding

-C	Cu wire bonding

Package

BC	BGA	516pin	0.8mm
BG	BGA	468pin	0.8mm
BA	BGA	373pin	0.8mm
BB	BGA	292pin	0.8mm
BD	BGA	156pin	0.7mm
FK/FV	QFP	176pin	0.5/0.4mm
FL/FM	QFP	144pin	0.5/0.4mm
FN/FQ	QFP	100pin	0.5/0.4mm

RH850/U2CX MATERIAL CODE NOMENCLATURE - SAMPLES



R7 F 70 26 02X F A XX -C#XX1

MCU

R	Renesas
7	MCU (high)
F	Flash
70	RH850

Application

10	F1x
12	E1x, C1x
13	P1x
14	D1x
15/16	F1x
23	U2Ax
25	U2Bx
26	U2Cx

Device

xx	Device specific number

Die revision number

A	Revision number

Material/ Version

-KC	T&R 1pin right upper side (BGA)
-HC	T&R 1pin left upper side (BGA)
-BC	Full carton Tray (BGA)
-KA	T&R 1pin right upper side (HLQFP)
-HA	T&R 1pin left upper side (HLQFP)
-BA	Full carton Tray (HLQFP)

Bonding

-C	Cu wire bonding

Package

BB	BGA	292pin	0.8mm
FB (China) / FM (Japan)	QFP	144pin	0.4mm
FD (China) / FQ (Japan)	QFP	100pin	0.4mm

A	Automotive

Temperature

3	Ta = -40 to + 105°C
4	Ta = -40 to + 125°C
F	Tj = -40 to + 160°C

RH850/E2X MATERIAL CODE NOMENCLATURE

R7 F 70 20 * * E A BB -C#YJ1

MCU

R	Renesas
7	MCU (high)
F	Flash
70	RH850

Application

20	E2x

Device

xx	Device specific number

Temperature

E	Tj = -40 to + 150°C

A	Automotive

Material/ Version

	Packaging
#Axx	Tray
#Hxx	T&R BGA (top left, formerly -E2)
	Plating
#xAx	Pb free/ Sn plating
#xCx	Pb free/
	Sample Versions
#Yxx	Sample
#YJx	WS = Working Sample
#YKx	ES = Engineering Sample
#YBx	CS = Commercial Sample
	Product Version
#xxx	x = 1, 2, 3,….

Bonding

-C	Cu wire bonding

Package

BG	BGA	468pin (28nm) 292pin (40nm)	0.8mm
BA	BGA	373pin	0.8mm