PCN# : [AMBD-2022-1168]

Product Change Notice (PCN)

Subject: Addition of front-end production factory for RL78/F13, F14 series with Cu bonding wire

Publication Date: 9/29/2022
Effective Date: 12/1/2023
Revision Description: Initial release

Description of Change:

For the RL78 / F13, F14 series with Cu bonding wire, we are planning to add a front-end production factory. We target flexible production and stable supply by this change. Therefore, we would like to kindly ask to aware of being added front-end factory for the purchasing products as below. Assignment of front-end factory for customer's order is made by our own decision according to the production capacity.

1) Additional Wafer process factory : Renesas Electronics Corporation (Naka Factory)
2) Additional Back grind factory : Renesas Semiconductor KL Sdn. Bhd. (RSKL)

Affected Product List:

Target products are the RL78/F13, F14 series as shown in Table 1. For detail, please refer the Appendix.

Table 1. Target products

	48pinLQFP (7x7/0.5)	64pinLQFP (10x10/0.5)	80pinLQFP (12x12/0.5)	100pinLQFP (14x14/0.5)
RL78/F13 (Cu wire bonding product)	○	○	○	—
RL78/F14 (Cu wire bonding product)	○	○	○	○

Reason for Change: For stable supply of products

Impact on Fit, Form, Function, Quality & Reliability:

The change will have no impact on the PKG shape, Assembly, Function, Quality & Reliability of the devices.

Product Identification:

This change can be identified by Marking, packing label or T/C code.

Please contact Renesas sales representatives for the T/C code.

Qualification Status:

Please refer to the Appendix.

Sample Availability Date: 12/1/2022

Device Material Declaration: Please contact Renesas sales representatives.

Note:

1. Acknowledgement must be received by Renesas within 30 days or Renesas will consider the change as approved.

2. If timely acknowledgement is provided by Customer, then Customer shall have 90 days from the date of receipt of this PCN to make any objections to this PCN. If Customer fails to make objections to this PCN within 90 days of the receipt of the PCN then Renesas will consider the PCN changes as approved.

3. If customer cannot accept the PCN then customer must provide Renesas with a last time buy demand and purchase order.

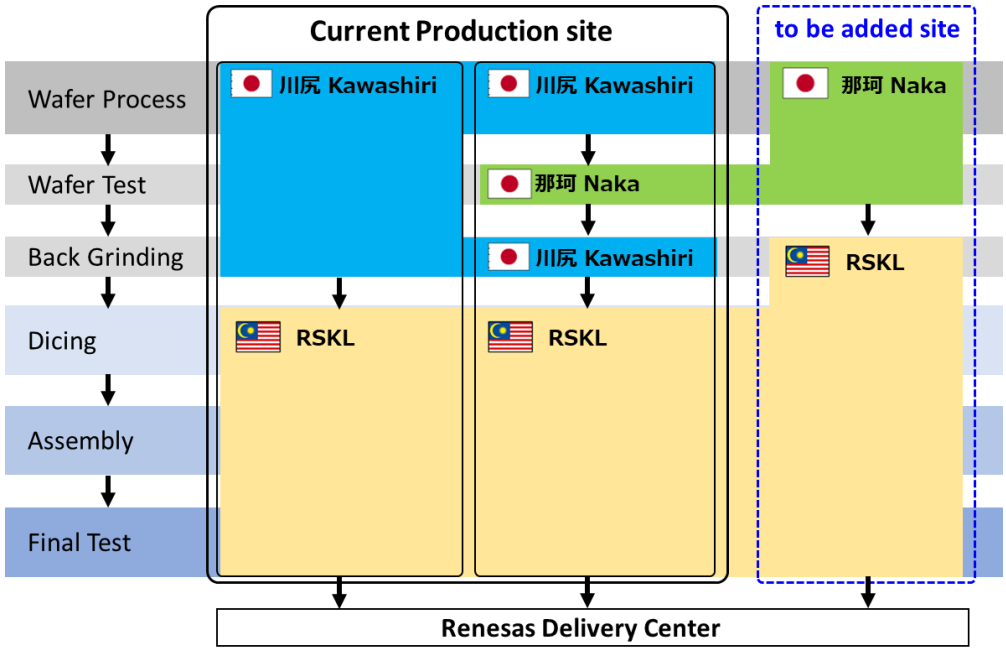
For additional information regarding this notice, please contact your Renesas sales representative.

Appendix

■Product specification

Item		Current	Addition
Order name		No change	
Front-end process	Diffusion factory	Kawashiri factory	Naka factory
	Design Process	No change (MF3(130um) process)	
	Wafer test factory	No change (Kawashiri / Naka)	
Back grind process	Back grind factory	Kawashiri factory	RSKL factory
Back-end process	Assembly factory	No change (RSKL)	
	Final test factory	No change (RSKL)	
	Assembly process	No change (Cu wire)	
	PKG shape	No change	
Mark		Changed (See Marking specification on this document)	
Packing label		Changed (See Packing specification on this document)	

■Production flow



■**Marking specification**

Mark example for R5F10PPJCLFB (F14 Cu wire product)

	川尻品/Kawashiri (Cu wire)	那珂品/Naka (Cu wire)
example 48pin		
example 64pin		
example 80pin		
example 100pin		

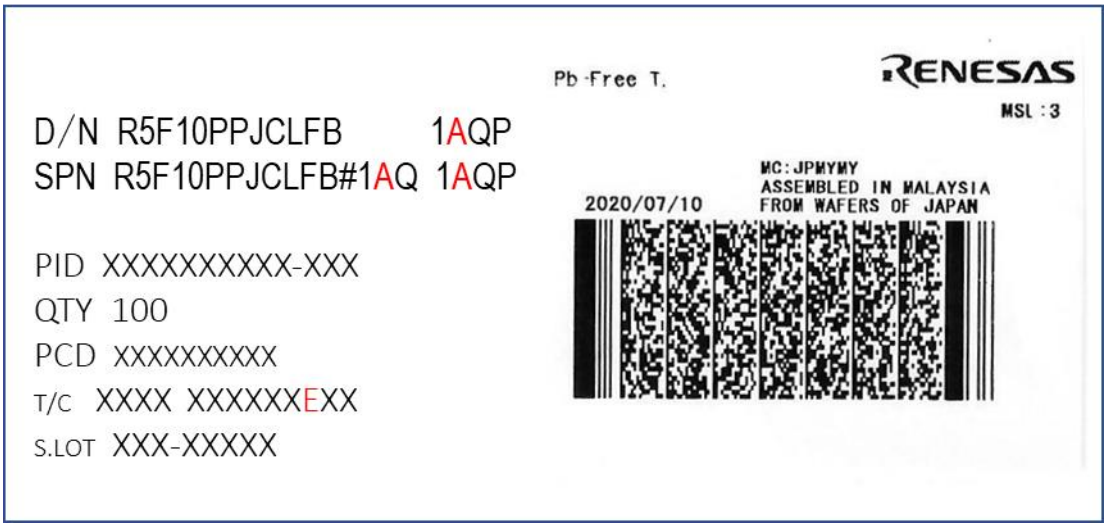
Remark　The front-end factory can be identified by the part of red character in above.

■**Packing label specification**

Label example for R5F10PPJCLFB#15Q (F14 100pin Full-Carton)

川尻品/Kawashiri

那珂品/Naka



Remark The front-end factory can be identified by the part of red character in above.

■Affected Products

PCN(AMBD-2022-1167/AMBD-2022-1168) RL78 PN List

Booking PN							
Before	After	PCN sample	Nickname	Memory size	PKG outline	Bonding wire	Packing
R5F10AGACKFB#15	R5F10AGACKFB#1A	R5F10AGACKFB#3A	F13(LIN)	16kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10AGACKFB#15Q	R5F10AGACKFB#1AQ	R5F10AGACKFB#3AQ	F13(LIN)	16kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10AGACKFB#35	R5F10AGACKFB#3A	R5F10AGACKFB#3A	F13(LIN)	16kB	LQFP 48pin-0.5p	Cu	Tray
R5F10AGACKFB#35Q	R5F10AGACKFB#3AQ	R5F10AGACKFB#3AQ	F13(LIN)	16kB	LQFP 48pin-0.5p	Cu	Tray
R5F10AGACKFB#55	R5F10AGACKFB#5A	R5F10AGACKFB#3A	F13(LIN)	16kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10AGACKFB#55Q	R5F10AGACKFB#5AQ	R5F10AGACKFB#3AQ	F13(LIN)	16kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10AGACLFB#15	R5F10AGACLFB#1A	R5F10AGACLFB#3A	F13(LIN)	16kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10AGACLFB#15Q	R5F10AGACLFB#1AQ	R5F10AGACLFB#3AQ	F13(LIN)	16kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10AGACLFB#35	R5F10AGACLFB#3A	R5F10AGACLFB#3A	F13(LIN)	16kB	LQFP 48pin-0.5p	Cu	Tray
R5F10AGACLFB#35Q	R5F10AGACLFB#3AQ	R5F10AGACLFB#3AQ	F13(LIN)	16kB	LQFP 48pin-0.5p	Cu	Tray
R5F10AGACLFB#55	R5F10AGACLFB#5A	R5F10AGACLFB#3A	F13(LIN)	16kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10AGACLFB#55Q	R5F10AGACLFB#5AQ	R5F10AGACLFB#3AQ	F13(LIN)	16kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10AGCCKFB#15	R5F10AGCCKFB#1A	R5F10AGCCKFB#3A	F13(LIN)	32kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10AGCCKFB#15Q	R5F10AGCCKFB#1AQ	R5F10AGCCKFB#3AQ	F13(LIN)	32kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10AGCCKFB#35	R5F10AGCCKFB#3A	R5F10AGCCKFB#3A	F13(LIN)	32kB	LQFP 48pin-0.5p	Cu	Tray
R5F10AGCCKFB#35Q	R5F10AGCCKFB#3AQ	R5F10AGCCKFB#3AQ	F13(LIN)	32kB	LQFP 48pin-0.5p	Cu	Tray
R5F10AGCCKFB#55	R5F10AGCCKFB#5A	R5F10AGCCKFB#3A	F13(LIN)	32kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10AGCCKFB#55Q	R5F10AGCCKFB#5AQ	R5F10AGCCKFB#3AQ	F13(LIN)	32kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10AGCCLFB#15	R5F10AGCCLFB#1A	R5F10AGCCLFB#3A	F13(LIN)	32kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10AGCCLFB#15Q	R5F10AGCCLFB#1AQ	R5F10AGCCLFB#3AQ	F13(LIN)	32kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10AGCCLFB#35	R5F10AGCCLFB#3A	R5F10AGCCLFB#3A	F13(LIN)	32kB	LQFP 48pin-0.5p	Cu	Tray
R5F10AGCCLFB#35Q	R5F10AGCCLFB#3AQ	R5F10AGCCLFB#3AQ	F13(LIN)	32kB	LQFP 48pin-0.5p	Cu	Tray
R5F10AGCCLFB#55	R5F10AGCCLFB#5A	R5F10AGCCLFB#3A	F13(LIN)	32kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10AGCCLFB#55Q	R5F10AGCCLFB#5AQ	R5F10AGCCLFB#3AQ	F13(LIN)	32kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10AGDCKFB#15	R5F10AGDCKFB#1A	R5F10AGDCKFB#3A	F13(LIN)	48kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10AGDCKFB#15Q	R5F10AGDCKFB#1AQ	R5F10AGDCKFB#3AQ	F13(LIN)	48kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10AGDCKFB#35	R5F10AGDCKFB#3A	R5F10AGDCKFB#3A	F13(LIN)	48kB	LQFP 48pin-0.5p	Cu	Tray
R5F10AGDCKFB#35Q	R5F10AGDCKFB#3AQ	R5F10AGDCKFB#3AQ	F13(LIN)	48kB	LQFP 48pin-0.5p	Cu	Tray
R5F10AGDCKFB#55	R5F10AGDCKFB#5A	R5F10AGDCKFB#3A	F13(LIN)	48kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10AGDCKFB#55Q	R5F10AGDCKFB#5AQ	R5F10AGDCKFB#3AQ	F13(LIN)	48kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10AGDCLFB#15	R5F10AGDCLFB#1A	R5F10AGDCLFB#3A	F13(LIN)	48kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10AGDCLFB#15Q	R5F10AGDCLFB#1AQ	R5F10AGDCLFB#3AQ	F13(LIN)	48kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10AGDCLFB#35	R5F10AGDCLFB#3A	R5F10AGDCLFB#3A	F13(LIN)	48kB	LQFP 48pin-0.5p	Cu	Tray
R5F10AGDCLFB#35Q	R5F10AGDCLFB#3AQ	R5F10AGDCLFB#3AQ	F13(LIN)	48kB	LQFP 48pin-0.5p	Cu	Tray
R5F10AGDCLFB#55	R5F10AGDCLFB#5A	R5F10AGDCLFB#3A	F13(LIN)	48kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10AGDCLFB#55Q	R5F10AGDCLFB#5AQ	R5F10AGDCLFB#3AQ	F13(LIN)	48kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10AGECKFB#15	R5F10AGECKFB#1A	R5F10AGECKFB#3A	F13(LIN)	64kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10AGECKFB#15Q	R5F10AGECKFB#1AQ	R5F10AGECKFB#3AQ	F13(LIN)	64kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10AGECKFB#35	R5F10AGECKFB#3A	R5F10AGECKFB#3A	F13(LIN)	64kB	LQFP 48pin-0.5p	Cu	Tray
R5F10AGECKFB#35Q	R5F10AGECKFB#3AQ	R5F10AGECKFB#3AQ	F13(LIN)	64kB	LQFP 48pin-0.5p	Cu	Tray
R5F10AGECKFB#55	R5F10AGECKFB#5A	R5F10AGECKFB#3A	F13(LIN)	64kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10AGECKFB#55Q	R5F10AGECKFB#5AQ	R5F10AGECKFB#3AQ	F13(LIN)	64kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10AGECLFB#15	R5F10AGECLFB#1A	R5F10AGECLFB#3A	F13(LIN)	64kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10AGECLFB#15Q	R5F10AGECLFB#1AQ	R5F10AGECLFB#3AQ	F13(LIN)	64kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10AGECLFB#35	R5F10AGECLFB#3A	R5F10AGECLFB#3A	F13(LIN)	64kB	LQFP 48pin-0.5p	Cu	Tray
R5F10AGECLFB#35Q	R5F10AGECLFB#3AQ	R5F10AGECLFB#3AQ	F13(LIN)	64kB	LQFP 48pin-0.5p	Cu	Tray
R5F10AGECLFB#55	R5F10AGECLFB#5A	R5F10AGECLFB#3A	F13(LIN)	64kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10AGECLFB#55Q	R5F10AGECLFB#5AQ	R5F10AGECLFB#3AQ	F13(LIN)	64kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10AGFCKFB#15	R5F10AGFCKFB#1A	R5F10AGFCKFB#3A	F13(LIN)	96kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10AGFCKFB#15Q	R5F10AGFCKFB#1AQ	R5F10AGFCKFB#3AQ	F13(LIN)	96kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10AGFCKFB#35	R5F10AGFCKFB#3A	R5F10AGFCKFB#3A	F13(LIN)	96kB	LQFP 48pin-0.5p	Cu	Tray
R5F10AGFCKFB#35Q	R5F10AGFCKFB#3AQ	R5F10AGFCKFB#3AQ	F13(LIN)	96kB	LQFP 48pin-0.5p	Cu	Tray
R5F10AGFCKFB#55	R5F10AGFCKFB#5A	R5F10AGFCKFB#3A	F13(LIN)	96kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10AGFCKFB#55Q	R5F10AGFCKFB#5AQ	R5F10AGFCKFB#3AQ	F13(LIN)	96kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10AGFCLFB#15	R5F10AGFCLFB#1A	R5F10AGFCLFB#3A	F13(LIN)	96kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10AGFCLFB#15Q	R5F10AGFCLFB#1AQ	R5F10AGFCLFB#3AQ	F13(LIN)	96kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10AGFCLFB#35	R5F10AGFCLFB#3A	R5F10AGFCLFB#3A	F13(LIN)	96kB	LQFP 48pin-0.5p	Cu	Tray
R5F10AGFCLFB#35Q	R5F10AGFCLFB#3AQ	R5F10AGFCLFB#3AQ	F13(LIN)	96kB	LQFP 48pin-0.5p	Cu	Tray
R5F10AGFCLFB#55	R5F10AGFCLFB#5A	R5F10AGFCLFB#3A	F13(LIN)	96kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10AGFCLFB#55Q	R5F10AGFCLFB#5AQ	R5F10AGFCLFB#3AQ	F13(LIN)	96kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10AGGCKFB#15	R5F10AGGCKFB#1A	R5F10AGGCKFB#3A	F13(LIN)	128kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10AGGCKFB#15Q	R5F10AGGCKFB#1AQ	R5F10AGGCKFB#3AQ	F13(LIN)	128kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10AGGCKFB#35	R5F10AGGCKFB#3A	R5F10AGGCKFB#3A	F13(LIN)	128kB	LQFP 48pin-0.5p	Cu	Tray
R5F10AGGCKFB#35Q	R5F10AGGCKFB#3AQ	R5F10AGGCKFB#3AQ	F13(LIN)	128kB	LQFP 48pin-0.5p	Cu	Tray
R5F10AGGCKFB#55	R5F10AGGCKFB#5A	R5F10AGGCKFB#3A	F13(LIN)	128kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10AGGCKFB#55Q	R5F10AGGCKFB#5AQ	R5F10AGGCKFB#3AQ	F13(LIN)	128kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10AGGCLFB#15	R5F10AGGCLFB#1A	R5F10AGGCLFB#3A	F13(LIN)	128kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10AGGCLFB#15Q	R5F10AGGCLFB#1AQ	R5F10AGGCLFB#3AQ	F13(LIN)	128kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10AGGCLFB#35	R5F10AGGCLFB#3A	R5F10AGGCLFB#3A	F13(LIN)	128kB	LQFP 48pin-0.5p	Cu	Tray
R5F10AGGCLFB#35Q	R5F10AGGCLFB#3AQ	R5F10AGGCLFB#3AQ	F13(LIN)	128kB	LQFP 48pin-0.5p	Cu	Tray
R5F10AGGCLFB#55	R5F10AGGCLFB#5A	R5F10AGGCLFB#3A	F13(LIN)	128kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10AGGCLFB#55Q	R5F10AGGCLFB#5AQ	R5F10AGGCLFB#3AQ	F13(LIN)	128kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10ALCCKFB#15	R5F10ALCCKFB#1A	R5F10ALCCKFB#3A	F13(LIN)	32kB	LQFP 64pin-0.5p	Cu	Full Carton

R5F10ALCCKFB#15Q	R5F10ALCCKFB#1AQ	R5F10ALCCKFB#3AQ	F13(LIN)	32kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10ALCCKFB#35	R5F10ALCCKFB#3A	R5F10ALCCKFB#3A	F13(LIN)	32kB	LQFP 64pin-0.5p	Cu	Tray
R5F10ALCCKFB#35Q	R5F10ALCCKFB#3AQ	R5F10ALCCKFB#3AQ	F13(LIN)	32kB	LQFP 64pin-0.5p	Cu	Tray
R5F10ALCCKFB#55	R5F10ALCCKFB#5A	R5F10ALCCKFB#3A	F13(LIN)	32kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10ALCCKFB#55Q	R5F10ALCCKFB#5AQ	R5F10ALCCKFB#3AQ	F13(LIN)	32kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10ALCCLFB#15	R5F10ALCCLFB#1A	R5F10ALCCLFB#3A	F13(LIN)	32kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10ALCCLFB#15Q	R5F10ALCCLFB#1AQ	R5F10ALCCLFB#3AQ	F13(LIN)	32kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10ALCCLFB#35	R5F10ALCCLFB#3A	R5F10ALCCLFB#3A	F13(LIN)	32kB	LQFP 64pin-0.5p	Cu	Tray
R5F10ALCCLFB#35Q	R5F10ALCCLFB#3AQ	R5F10ALCCLFB#3AQ	F13(LIN)	32kB	LQFP 64pin-0.5p	Cu	Tray
R5F10ALCCLFB#55	R5F10ALCCLFB#5A	R5F10ALCCLFB#3A	F13(LIN)	32kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10ALCCLFB#55Q	R5F10ALCCLFB#5AQ	R5F10ALCCLFB#3AQ	F13(LIN)	32kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10ALDCKFB#15	R5F10ALDCKFB#1A	R5F10ALDCKFB#3A	F13(LIN)	48kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10ALDCKFB#15Q	R5F10ALDCKFB#1AQ	R5F10ALDCKFB#3AQ	F13(LIN)	48kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10ALDCKFB#35	R5F10ALDCKFB#3A	R5F10ALDCKFB#3A	F13(LIN)	48kB	LQFP 64pin-0.5p	Cu	Tray
R5F10ALDCKFB#35Q	R5F10ALDCKFB#3AQ	R5F10ALDCKFB#3AQ	F13(LIN)	48kB	LQFP 64pin-0.5p	Cu	Tray
R5F10ALDCKFB#55	R5F10ALDCKFB#5A	R5F10ALDCKFB#3A	F13(LIN)	48kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10ALDCKFB#55Q	R5F10ALDCKFB#5AQ	R5F10ALDCKFB#3AQ	F13(LIN)	48kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10ALDCLFB#15	R5F10ALDCLFB#1A	R5F10ALDCLFB#3A	F13(LIN)	48kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10ALDCLFB#15Q	R5F10ALDCLFB#1AQ	R5F10ALDCLFB#3AQ	F13(LIN)	48kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10ALDCLFB#35	R5F10ALDCLFB#3A	R5F10ALDCLFB#3A	F13(LIN)	48kB	LQFP 64pin-0.5p	Cu	Tray
R5F10ALDCLFB#35Q	R5F10ALDCLFB#3AQ	R5F10ALDCLFB#3AQ	F13(LIN)	48kB	LQFP 64pin-0.5p	Cu	Tray
R5F10ALDCLFB#55	R5F10ALDCLFB#5A	R5F10ALDCLFB#3A	F13(LIN)	48kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10ALDCLFB#55Q	R5F10ALDCLFB#5AQ	R5F10ALDCLFB#3AQ	F13(LIN)	48kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10ALECKFB#15	R5F10ALECKFB#1A	R5F10ALECKFB#3A	F13(LIN)	64kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10ALECKFB#15Q	R5F10ALECKFB#1AQ	R5F10ALECKFB#3AQ	F13(LIN)	64kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10ALECKFB#35	R5F10ALECKFB#3A	R5F10ALECKFB#3A	F13(LIN)	64kB	LQFP 64pin-0.5p	Cu	Tray
R5F10ALECKFB#35Q	R5F10ALECKFB#3AQ	R5F10ALECKFB#3AQ	F13(LIN)	64kB	LQFP 64pin-0.5p	Cu	Tray
R5F10ALECKFB#55	R5F10ALECKFB#5A	R5F10ALECKFB#3A	F13(LIN)	64kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10ALECKFB#55Q	R5F10ALECKFB#5AQ	R5F10ALECKFB#3AQ	F13(LIN)	64kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10ALECLFB#15	R5F10ALECLFB#1A	R5F10ALECLFB#3A	F13(LIN)	64kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10ALECLFB#15Q	R5F10ALECLFB#1AQ	R5F10ALECLFB#3AQ	F13(LIN)	64kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10ALECLFB#35	R5F10ALECLFB#3A	R5F10ALECLFB#3A	F13(LIN)	64kB	LQFP 64pin-0.5p	Cu	Tray
R5F10ALECLFB#35Q	R5F10ALECLFB#3AQ	R5F10ALECLFB#3AQ	F13(LIN)	64kB	LQFP 64pin-0.5p	Cu	Tray
R5F10ALECLFB#55	R5F10ALECLFB#5A	R5F10ALECLFB#3A	F13(LIN)	64kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10ALECLFB#55Q	R5F10ALECLFB#5AQ	R5F10ALECLFB#3AQ	F13(LIN)	64kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10ALFCKFB#15	R5F10ALFCKFB#1A	R5F10ALFCKFB#3A	F13(LIN)	96kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10ALFCKFB#15Q	R5F10ALFCKFB#1AQ	R5F10ALFCKFB#3AQ	F13(LIN)	96kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10ALFCKFB#35	R5F10ALFCKFB#3A	R5F10ALFCKFB#3A	F13(LIN)	96kB	LQFP 64pin-0.5p	Cu	Tray
R5F10ALFCKFB#35Q	R5F10ALFCKFB#3AQ	R5F10ALFCKFB#3AQ	F13(LIN)	96kB	LQFP 64pin-0.5p	Cu	Tray
R5F10ALFCKFB#55	R5F10ALFCKFB#5A	R5F10ALFCKFB#3A	F13(LIN)	96kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10ALFCKFB#55Q	R5F10ALFCKFB#5AQ	R5F10ALFCKFB#3AQ	F13(LIN)	96kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10ALFCLFB#15	R5F10ALFCLFB#1A	R5F10ALFCLFB#3A	F13(LIN)	96kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10ALFCLFB#15Q	R5F10ALFCLFB#1AQ	R5F10ALFCLFB#3AQ	F13(LIN)	96kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10ALFCLFB#35	R5F10ALFCLFB#3A	R5F10ALFCLFB#3A	F13(LIN)	96kB	LQFP 64pin-0.5p	Cu	Tray
R5F10ALFCLFB#35Q	R5F10ALFCLFB#3AQ	R5F10ALFCLFB#3AQ	F13(LIN)	96kB	LQFP 64pin-0.5p	Cu	Tray
R5F10ALFCLFB#55	R5F10ALFCLFB#5A	R5F10ALFCLFB#3A	F13(LIN)	96kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10ALFCLFB#55Q	R5F10ALFCLFB#5AQ	R5F10ALFCLFB#3AQ	F13(LIN)	96kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10ALGCKFB#15	R5F10ALGCKFB#1A	R5F10ALGCKFB#3A	F13(LIN)	128kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10ALGCKFB#15Q	R5F10ALGCKFB#1AQ	R5F10ALGCKFB#3AQ	F13(LIN)	128kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10ALGCKFB#35	R5F10ALGCKFB#3A	R5F10ALGCKFB#3A	F13(LIN)	128kB	LQFP 64pin-0.5p	Cu	Tray
R5F10ALGCKFB#35Q	R5F10ALGCKFB#3AQ	R5F10ALGCKFB#3AQ	F13(LIN)	128kB	LQFP 64pin-0.5p	Cu	Tray
R5F10ALGCKFB#55	R5F10ALGCKFB#5A	R5F10ALGCKFB#3A	F13(LIN)	128kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10ALGCKFB#55Q	R5F10ALGCKFB#5AQ	R5F10ALGCKFB#3AQ	F13(LIN)	128kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10ALGCLFB#15	R5F10ALGCLFB#1A	R5F10ALGCLFB#3A	F13(LIN)	128kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10ALGCLFB#15Q	R5F10ALGCLFB#1AQ	R5F10ALGCLFB#3AQ	F13(LIN)	128kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10ALGCLFB#35	R5F10ALGCLFB#3A	R5F10ALGCLFB#3A	F13(LIN)	128kB	LQFP 64pin-0.5p	Cu	Tray
R5F10ALGCLFB#35Q	R5F10ALGCLFB#3AQ	R5F10ALGCLFB#3AQ	F13(LIN)	128kB	LQFP 64pin-0.5p	Cu	Tray
R5F10ALGCLFB#55	R5F10ALGCLFB#5A	R5F10ALGCLFB#3A	F13(LIN)	128kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10ALGCLFB#55Q	R5F10ALGCLFB#5AQ	R5F10ALGCLFB#3AQ	F13(LIN)	128kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10AMECKFB#15	R5F10AMECKFB#1A	R5F10AMECKFB#3A	F13(LIN)	64kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10AMECKFB#15Q	R5F10AMECKFB#1AQ	R5F10AMECKFB#3AQ	F13(LIN)	64kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10AMECKFB#35	R5F10AMECKFB#3A	R5F10AMECKFB#3A	F13(LIN)	64kB	LQFP 80pin-0.5p	Cu	Tray
R5F10AMECKFB#35Q	R5F10AMECKFB#3AQ	R5F10AMECKFB#3AQ	F13(LIN)	64kB	LQFP 80pin-0.5p	Cu	Tray
R5F10AMECKFB#55	R5F10AMECKFB#5A	R5F10AMECKFB#3A	F13(LIN)	64kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10AMECKFB#55Q	R5F10AMECKFB#5AQ	R5F10AMECKFB#3AQ	F13(LIN)	64kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10AMECLFB#15	R5F10AMECLFB#1A	R5F10AMECLFB#3A	F13(LIN)	64kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10AMECLFB#15Q	R5F10AMECLFB#1AQ	R5F10AMECLFB#3AQ	F13(LIN)	64kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10AMECLFB#35	R5F10AMECLFB#3A	R5F10AMECLFB#3A	F13(LIN)	64kB	LQFP 80pin-0.5p	Cu	Tray
R5F10AMECLFB#35Q	R5F10AMECLFB#3AQ	R5F10AMECLFB#3AQ	F13(LIN)	64kB	LQFP 80pin-0.5p	Cu	Tray
R5F10AMECLFB#55	R5F10AMECLFB#5A	R5F10AMECLFB#3A	F13(LIN)	64kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10AMECLFB#55Q	R5F10AMECLFB#5AQ	R5F10AMECLFB#3AQ	F13(LIN)	64kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10AMFCKFB#15	R5F10AMFCKFB#1A	R5F10AMFCKFB#3A	F13(LIN)	96kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10AMFCKFB#15Q	R5F10AMFCKFB#1AQ	R5F10AMFCKFB#3AQ	F13(LIN)	96kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10AMFCKFB#35	R5F10AMFCKFB#3A	R5F10AMFCKFB#3A	F13(LIN)	96kB	LQFP 80pin-0.5p	Cu	Tray
R5F10AMFCKFB#35Q	R5F10AMFCKFB#3AQ	R5F10AMFCKFB#3AQ	F13(LIN)	96kB	LQFP 80pin-0.5p	Cu	Tray
R5F10AMFCKFB#55	R5F10AMFCKFB#5A	R5F10AMFCKFB#3A	F13(LIN)	96kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10AMFCKFB#55Q	R5F10AMFCKFB#5AQ	R5F10AMFCKFB#3AQ	F13(LIN)	96kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10AMFCLFB#15	R5F10AMFCLFB#1A	R5F10AMFCLFB#3A	F13(LIN)	96kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10AMFCLFB#15Q	R5F10AMFCLFB#1AQ	R5F10AMFCLFB#3AQ	F13(LIN)	96kB	LQFP 80pin-0.5p	Cu	Full Carton

R5F10AMFCLFB#35	R5F10AMFCLFB#3A	R5F10AMFCLFB#3A	F13(LIN)	96kB	LQFP 80pin-0.5p	Cu	Tray
R5F10AMFCLFB#35Q	R5F10AMFCLFB#3AQ	R5F10AMFCLFB#3AQ	F13(LIN)	96kB	LQFP 80pin-0.5p	Cu	Tray
R5F10AMFCLFB#55	R5F10AMFCLFB#5A	R5F10AMFCLFB#3A	F13(LIN)	96kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10AMFCLFB#55Q	R5F10AMFCLFB#5AQ	R5F10AMFCLFB#3AQ	F13(LIN)	96kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10AMGCKFB#15	R5F10AMGCKFB#1A	R5F10AMGCKFB#3A	F13(LIN)	128kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10AMGCKFB#15Q	R5F10AMGCKFB#1AQ	R5F10AMGCKFB#3AQ	F13(LIN)	128kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10AMGCKFB#35	R5F10AMGCKFB#3A	R5F10AMGCKFB#3A	F13(LIN)	128kB	LQFP 80pin-0.5p	Cu	Tray
R5F10AMGCKFB#35Q	R5F10AMGCKFB#3AQ	R5F10AMGCKFB#3AQ	F13(LIN)	128kB	LQFP 80pin-0.5p	Cu	Tray
R5F10AMGCKFB#55	R5F10AMGCKFB#5A	R5F10AMGCKFB#3A	F13(LIN)	128kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10AMGCKFB#55Q	R5F10AMGCKFB#5AQ	R5F10AMGCKFB#3AQ	F13(LIN)	128kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10AMGCLFB#15	R5F10AMGCLFB#1A	R5F10AMGCLFB#3A	F13(LIN)	128kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10AMGCLFB#15Q	R5F10AMGCLFB#1AQ	R5F10AMGCLFB#3AQ	F13(LIN)	128kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10AMGCLFB#35	R5F10AMGCLFB#3A	R5F10AMGCLFB#3A	F13(LIN)	128kB	LQFP 80pin-0.5p	Cu	Tray
R5F10AMGCLFB#35Q	R5F10AMGCLFB#3AQ	R5F10AMGCLFB#3AQ	F13(LIN)	128kB	LQFP 80pin-0.5p	Cu	Tray
R5F10AMGCLFB#55	R5F10AMGCLFB#5A	R5F10AMGCLFB#3A	F13(LIN)	128kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10AMGCLFB#55Q	R5F10AMGCLFB#5AQ	R5F10AMGCLFB#3AQ	F13(LIN)	128kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10BGCCKFB#15	R5F10BGCCKFB#1A	R5F10BGCCKFB#3A	F13(CAN/LIN)	32kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10BGCCKFB#15Q	R5F10BGCCKFB#1AQ	R5F10BGCCKFB#3AQ	F13(CAN/LIN)	32kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10BGCCKFB#35	R5F10BGCCKFB#3A	R5F10BGCCKFB#3A	F13(CAN/LIN)	32kB	LQFP 48pin-0.5p	Cu	Tray
R5F10BGCCKFB#35Q	R5F10BGCCKFB#3AQ	R5F10BGCCKFB#3AQ	F13(CAN/LIN)	32kB	LQFP 48pin-0.5p	Cu	Tray
R5F10BGCCKFB#55	R5F10BGCCKFB#5A	R5F10BGCCKFB#3A	F13(CAN/LIN)	32kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10BGCCKFB#55Q	R5F10BGCCKFB#5AQ	R5F10BGCCKFB#3AQ	F13(CAN/LIN)	32kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10BGCCLFB#15	R5F10BGCCLFB#1A	R5F10BGCCLFB#3A	F13(CAN/LIN)	32kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10BGCCLFB#15Q	R5F10BGCCLFB#1AQ	R5F10BGCCLFB#3AQ	F13(CAN/LIN)	32kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10BGCCLFB#35	R5F10BGCCLFB#3A	R5F10BGCCLFB#3A	F13(CAN/LIN)	32kB	LQFP 48pin-0.5p	Cu	Tray
R5F10BGCCLFB#35Q	R5F10BGCCLFB#3AQ	R5F10BGCCLFB#3AQ	F13(CAN/LIN)	32kB	LQFP 48pin-0.5p	Cu	Tray
R5F10BGCCLFB#55	R5F10BGCCLFB#5A	R5F10BGCCLFB#3A	F13(CAN/LIN)	32kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10BGCCLFB#55Q	R5F10BGCCLFB#5AQ	R5F10BGCCLFB#3AQ	F13(CAN/LIN)	32kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10BGDCKFB#15	R5F10BGDCKFB#1A	R5F10BGDCKFB#3A	F13(CAN/LIN)	48kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10BGDCKFB#15Q	R5F10BGDCKFB#1AQ	R5F10BGDCKFB#3AQ	F13(CAN/LIN)	48kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10BGDCKFB#35	R5F10BGDCKFB#3A	R5F10BGDCKFB#3A	F13(CAN/LIN)	48kB	LQFP 48pin-0.5p	Cu	Tray
R5F10BGDCKFB#35Q	R5F10BGDCKFB#3AQ	R5F10BGDCKFB#3AQ	F13(CAN/LIN)	48kB	LQFP 48pin-0.5p	Cu	Tray
R5F10BGDCKFB#55	R5F10BGDCKFB#5A	R5F10BGDCKFB#3A	F13(CAN/LIN)	48kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10BGDCKFB#55Q	R5F10BGDCKFB#5AQ	R5F10BGDCKFB#3AQ	F13(CAN/LIN)	48kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10BGDCLFB#15	R5F10BGDCLFB#1A	R5F10BGDCLFB#3A	F13(CAN/LIN)	48kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10BGDCLFB#15Q	R5F10BGDCLFB#1AQ	R5F10BGDCLFB#3AQ	F13(CAN/LIN)	48kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10BGDCLFB#35	R5F10BGDCLFB#3A	R5F10BGDCLFB#3A	F13(CAN/LIN)	48kB	LQFP 48pin-0.5p	Cu	Tray
R5F10BGDCLFB#35Q	R5F10BGDCLFB#3AQ	R5F10BGDCLFB#3AQ	F13(CAN/LIN)	48kB	LQFP 48pin-0.5p	Cu	Tray
R5F10BGDCLFB#55	R5F10BGDCLFB#5A	R5F10BGDCLFB#3A	F13(CAN/LIN)	48kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10BGDCLFB#55Q	R5F10BGDCLFB#5AQ	R5F10BGDCLFB#3AQ	F13(CAN/LIN)	48kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10BGECKFB#15	R5F10BGECKFB#1A	R5F10BGECKFB#3A	F13(CAN/LIN)	64kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10BGECKFB#15Q	R5F10BGECKFB#1AQ	R5F10BGECKFB#3AQ	F13(CAN/LIN)	64kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10BGECKFB#35	R5F10BGECKFB#3A	R5F10BGECKFB#3A	F13(CAN/LIN)	64kB	LQFP 48pin-0.5p	Cu	Tray
R5F10BGECKFB#35Q	R5F10BGECKFB#3AQ	R5F10BGECKFB#3AQ	F13(CAN/LIN)	64kB	LQFP 48pin-0.5p	Cu	Tray
R5F10BGECKFB#55	R5F10BGECKFB#5A	R5F10BGECKFB#3A	F13(CAN/LIN)	64kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10BGECKFB#55Q	R5F10BGECKFB#5AQ	R5F10BGECKFB#3AQ	F13(CAN/LIN)	64kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10BGECLFB#15	R5F10BGECLFB#1A	R5F10BGECLFB#3A	F13(CAN/LIN)	64kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10BGECLFB#15Q	R5F10BGECLFB#1AQ	R5F10BGECLFB#3AQ	F13(CAN/LIN)	64kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10BGECLFB#35	R5F10BGECLFB#3A	R5F10BGECLFB#3A	F13(CAN/LIN)	64kB	LQFP 48pin-0.5p	Cu	Tray
R5F10BGECLFB#35Q	R5F10BGECLFB#3AQ	R5F10BGECLFB#3AQ	F13(CAN/LIN)	64kB	LQFP 48pin-0.5p	Cu	Tray
R5F10BGECLFB#55	R5F10BGECLFB#5A	R5F10BGECLFB#3A	F13(CAN/LIN)	64kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10BGECLFB#55Q	R5F10BGECLFB#5AQ	R5F10BGECLFB#3AQ	F13(CAN/LIN)	64kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10BGFCKFB#15	R5F10BGFCKFB#1A	R5F10BGFCKFB#3A	F13(CAN/LIN)	96kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10BGFCKFB#15Q	R5F10BGFCKFB#1AQ	R5F10BGFCKFB#3AQ	F13(CAN/LIN)	96kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10BGFCKFB#35	R5F10BGFCKFB#3A	R5F10BGFCKFB#3A	F13(CAN/LIN)	96kB	LQFP 48pin-0.5p	Cu	Tray
R5F10BGFCKFB#35Q	R5F10BGFCKFB#3AQ	R5F10BGFCKFB#3AQ	F13(CAN/LIN)	96kB	LQFP 48pin-0.5p	Cu	Tray
R5F10BGFCKFB#55	R5F10BGFCKFB#5A	R5F10BGFCKFB#3A	F13(CAN/LIN)	96kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10BGFCKFB#55Q	R5F10BGFCKFB#5AQ	R5F10BGFCKFB#3AQ	F13(CAN/LIN)	96kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10BGFCLFB#15	R5F10BGFCLFB#1A	R5F10BGFCLFB#3A	F13(CAN/LIN)	96kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10BGFCLFB#15Q	R5F10BGFCLFB#1AQ	R5F10BGFCLFB#3AQ	F13(CAN/LIN)	96kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10BGFCLFB#35	R5F10BGFCLFB#3A	R5F10BGFCLFB#3A	F13(CAN/LIN)	96kB	LQFP 48pin-0.5p	Cu	Tray
R5F10BGFCLFB#35Q	R5F10BGFCLFB#3AQ	R5F10BGFCLFB#3AQ	F13(CAN/LIN)	96kB	LQFP 48pin-0.5p	Cu	Tray
R5F10BGFCLFB#55	R5F10BGFCLFB#5A	R5F10BGFCLFB#3A	F13(CAN/LIN)	96kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10BGFCLFB#55Q	R5F10BGFCLFB#5AQ	R5F10BGFCLFB#3AQ	F13(CAN/LIN)	96kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10BGGCKFB#15	R5F10BGGCKFB#1A	R5F10BGGCKFB#3A	F13(CAN/LIN)	128kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10BGGCKFB#15Q	R5F10BGGCKFB#1AQ	R5F10BGGCKFB#3AQ	F13(CAN/LIN)	128kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10BGGCKFB#35	R5F10BGGCKFB#3A	R5F10BGGCKFB#3A	F13(CAN/LIN)	128kB	LQFP 48pin-0.5p	Cu	Tray
R5F10BGGCKFB#35Q	R5F10BGGCKFB#3AQ	R5F10BGGCKFB#3AQ	F13(CAN/LIN)	128kB	LQFP 48pin-0.5p	Cu	Tray
R5F10BGGCKFB#55	R5F10BGGCKFB#5A	R5F10BGGCKFB#3A	F13(CAN/LIN)	128kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10BGGCKFB#55Q	R5F10BGGCKFB#5AQ	R5F10BGGCKFB#3AQ	F13(CAN/LIN)	128kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10BGGCLFB#15	R5F10BGGCLFB#1A	R5F10BGGCLFB#3A	F13(CAN/LIN)	128kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10BGGCLFB#15Q	R5F10BGGCLFB#1AQ	R5F10BGGCLFB#3AQ	F13(CAN/LIN)	128kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10BGGCLFB#35	R5F10BGGCLFB#3A	R5F10BGGCLFB#3A	F13(CAN/LIN)	128kB	LQFP 48pin-0.5p	Cu	Tray
R5F10BGGCLFB#35Q	R5F10BGGCLFB#3AQ	R5F10BGGCLFB#3AQ	F13(CAN/LIN)	128kB	LQFP 48pin-0.5p	Cu	Tray
R5F10BGGCLFB#55	R5F10BGGCLFB#5A	R5F10BGGCLFB#3A	F13(CAN/LIN)	128kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10BGGCLFB#55Q	R5F10BGGCLFB#5AQ	R5F10BGGCLFB#3AQ	F13(CAN/LIN)	128kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10BLCCKFB#15	R5F10BLCCKFB#1A	R5F10BLCCKFB#3A	F13(CAN/LIN)	32kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10BLCCKFB#15Q	R5F10BLCCKFB#1AQ	R5F10BLCCKFB#3AQ	F13(CAN/LIN)	32kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10BLCCKFB#35	R5F10BLCCKFB#3A	R5F10BLCCKFB#3A	F13(CAN/LIN)	32kB	LQFP 64pin-0.5p	Cu	Tray

R5F10BLCCKFB#35Q	R5F10BLCCKFB#3AQ	R5F10BLCCKFB#3AQ	F13(CAN/LIN)	32kB	LQFP 64pin-0.5p	Cu	Tray
R5F10BLCCKFB#55	R5F10BLCCKFB#5A	R5F10BLCCKFB#3A	F13(CAN/LIN)	32kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10BLCCKFB#55Q	R5F10BLCCKFB#5AQ	R5F10BLCCKFB#3AQ	F13(CAN/LIN)	32kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10BLCCLFB#15	R5F10BLCCLFB#1A	R5F10BLCCLFB#3A	F13(CAN/LIN)	32kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10BLCCLFB#15Q	R5F10BLCCLFB#1AQ	R5F10BLCCLFB#3AQ	F13(CAN/LIN)	32kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10BLCCLFB#35	R5F10BLCCLFB#3A	R5F10BLCCLFB#3A	F13(CAN/LIN)	32kB	LQFP 64pin-0.5p	Cu	Tray
R5F10BLCCLFB#35Q	R5F10BLCCLFB#3AQ	R5F10BLCCLFB#3AQ	F13(CAN/LIN)	32kB	LQFP 64pin-0.5p	Cu	Tray
R5F10BLCCLFB#55	R5F10BLCCLFB#5A	R5F10BLCCLFB#3A	F13(CAN/LIN)	32kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10BLCCLFB#55Q	R5F10BLCCLFB#5AQ	R5F10BLCCLFB#3AQ	F13(CAN/LIN)	32kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10BLDCKFB#15	R5F10BLDCKFB#1A	R5F10BLDCKFB#3A	F13(CAN/LIN)	48kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10BLDCKFB#15Q	R5F10BLDCKFB#1AQ	R5F10BLDCKFB#3AQ	F13(CAN/LIN)	48kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10BLDCKFB#35	R5F10BLDCKFB#3A	R5F10BLDCKFB#3A	F13(CAN/LIN)	48kB	LQFP 64pin-0.5p	Cu	Tray
R5F10BLDCKFB#35Q	R5F10BLDCKFB#3AQ	R5F10BLDCKFB#3AQ	F13(CAN/LIN)	48kB	LQFP 64pin-0.5p	Cu	Tray
R5F10BLDCKFB#55	R5F10BLDCKFB#5A	R5F10BLDCKFB#3A	F13(CAN/LIN)	48kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10BLDCKFB#55Q	R5F10BLDCKFB#5AQ	R5F10BLDCKFB#3AQ	F13(CAN/LIN)	48kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10BLDCLFB#15	R5F10BLDCLFB#1A	R5F10BLDCLFB#3A	F13(CAN/LIN)	48kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10BLDCLFB#15Q	R5F10BLDCLFB#1AQ	R5F10BLDCLFB#3AQ	F13(CAN/LIN)	48kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10BLDCLFB#35	R5F10BLDCLFB#3A	R5F10BLDCLFB#3A	F13(CAN/LIN)	48kB	LQFP 64pin-0.5p	Cu	Tray
R5F10BLDCLFB#35Q	R5F10BLDCLFB#3AQ	R5F10BLDCLFB#3AQ	F13(CAN/LIN)	48kB	LQFP 64pin-0.5p	Cu	Tray
R5F10BLDCLFB#55	R5F10BLDCLFB#5A	R5F10BLDCLFB#3A	F13(CAN/LIN)	48kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10BLDCLFB#55Q	R5F10BLDCLFB#5AQ	R5F10BLDCLFB#3AQ	F13(CAN/LIN)	48kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10BLECKFB#15	R5F10BLECKFB#1A	R5F10BLECKFB#3A	F13(CAN/LIN)	64kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10BLECKFB#15Q	R5F10BLECKFB#1AQ	R5F10BLECKFB#3AQ	F13(CAN/LIN)	64kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10BLECKFB#35	R5F10BLECKFB#3A	R5F10BLECKFB#3A	F13(CAN/LIN)	64kB	LQFP 64pin-0.5p	Cu	Tray
R5F10BLECKFB#35Q	R5F10BLECKFB#3AQ	R5F10BLECKFB#3AQ	F13(CAN/LIN)	64kB	LQFP 64pin-0.5p	Cu	Tray
R5F10BLECKFB#55	R5F10BLECKFB#5A	R5F10BLECKFB#3A	F13(CAN/LIN)	64kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10BLECKFB#55Q	R5F10BLECKFB#5AQ	R5F10BLECKFB#3AQ	F13(CAN/LIN)	64kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10BLECLFB#15	R5F10BLECLFB#1A	R5F10BLECLFB#3A	F13(CAN/LIN)	64kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10BLECLFB#15Q	R5F10BLECLFB#1AQ	R5F10BLECLFB#3AQ	F13(CAN/LIN)	64kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10BLECLFB#35	R5F10BLECLFB#3A	R5F10BLECLFB#3A	F13(CAN/LIN)	64kB	LQFP 64pin-0.5p	Cu	Tray
R5F10BLECLFB#35Q	R5F10BLECLFB#3AQ	R5F10BLECLFB#3AQ	F13(CAN/LIN)	64kB	LQFP 64pin-0.5p	Cu	Tray
R5F10BLECLFB#55	R5F10BLECLFB#5A	R5F10BLECLFB#3A	F13(CAN/LIN)	64kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10BLECLFB#55Q	R5F10BLECLFB#5AQ	R5F10BLECLFB#3AQ	F13(CAN/LIN)	64kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10BLFCKFB#15	R5F10BLFCKFB#1A	R5F10BLFCKFB#3A	F13(CAN/LIN)	96kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10BLFCKFB#15Q	R5F10BLFCKFB#1AQ	R5F10BLFCKFB#3AQ	F13(CAN/LIN)	96kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10BLFCKFB#35	R5F10BLFCKFB#3A	R5F10BLFCKFB#3A	F13(CAN/LIN)	96kB	LQFP 64pin-0.5p	Cu	Tray
R5F10BLFCKFB#35Q	R5F10BLFCKFB#3AQ	R5F10BLFCKFB#3AQ	F13(CAN/LIN)	96kB	LQFP 64pin-0.5p	Cu	Tray
R5F10BLFCKFB#55	R5F10BLFCKFB#5A	R5F10BLFCKFB#3A	F13(CAN/LIN)	96kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10BLFCKFB#55Q	R5F10BLFCKFB#5AQ	R5F10BLFCKFB#3AQ	F13(CAN/LIN)	96kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10BLFCLFB#15	R5F10BLFCLFB#1A	R5F10BLFCLFB#3A	F13(CAN/LIN)	96kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10BLFCLFB#15Q	R5F10BLFCLFB#1AQ	R5F10BLFCLFB#3AQ	F13(CAN/LIN)	96kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10BLFCLFB#35	R5F10BLFCLFB#3A	R5F10BLFCLFB#3A	F13(CAN/LIN)	96kB	LQFP 64pin-0.5p	Cu	Tray
R5F10BLFCLFB#35Q	R5F10BLFCLFB#3AQ	R5F10BLFCLFB#3AQ	F13(CAN/LIN)	96kB	LQFP 64pin-0.5p	Cu	Tray
R5F10BLFCLFB#55	R5F10BLFCLFB#5A	R5F10BLFCLFB#3A	F13(CAN/LIN)	96kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10BLFCLFB#55Q	R5F10BLFCLFB#5AQ	R5F10BLFCLFB#3AQ	F13(CAN/LIN)	96kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10BLGCKFB#15	R5F10BLGCKFB#1A	R5F10BLGCKFB#3A	F13(CAN/LIN)	128kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10BLGCKFB#15Q	R5F10BLGCKFB#1AQ	R5F10BLGCKFB#3AQ	F13(CAN/LIN)	128kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10BLGCKFB#35	R5F10BLGCKFB#3A	R5F10BLGCKFB#3A	F13(CAN/LIN)	128kB	LQFP 64pin-0.5p	Cu	Tray
R5F10BLGCKFB#35Q	R5F10BLGCKFB#3AQ	R5F10BLGCKFB#3AQ	F13(CAN/LIN)	128kB	LQFP 64pin-0.5p	Cu	Tray
R5F10BLGCKFB#55	R5F10BLGCKFB#5A	R5F10BLGCKFB#3A	F13(CAN/LIN)	128kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10BLGCKFB#55Q	R5F10BLGCKFB#5AQ	R5F10BLGCKFB#3AQ	F13(CAN/LIN)	128kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10BLGCLFB#15	R5F10BLGCLFB#1A	R5F10BLGCLFB#3A	F13(CAN/LIN)	128kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10BLGCLFB#15Q	R5F10BLGCLFB#1AQ	R5F10BLGCLFB#3AQ	F13(CAN/LIN)	128kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10BLGCLFB#35	R5F10BLGCLFB#3A	R5F10BLGCLFB#3A	F13(CAN/LIN)	128kB	LQFP 64pin-0.5p	Cu	Tray
R5F10BLGCLFB#35Q	R5F10BLGCLFB#3AQ	R5F10BLGCLFB#3AQ	F13(CAN/LIN)	128kB	LQFP 64pin-0.5p	Cu	Tray
R5F10BLGCLFB#55	R5F10BLGCLFB#5A	R5F10BLGCLFB#3A	F13(CAN/LIN)	128kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10BLGCLFB#55Q	R5F10BLGCLFB#5AQ	R5F10BLGCLFB#3AQ	F13(CAN/LIN)	128kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10BMECKFB#15	R5F10BMECKFB#1A	R5F10BMECKFB#3A	F13(CAN/LIN)	64kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10BMECKFB#15Q	R5F10BMECKFB#1AQ	R5F10BMECKFB#3AQ	F13(CAN/LIN)	64kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10BMECKFB#35	R5F10BMECKFB#3A	R5F10BMECKFB#3A	F13(CAN/LIN)	64kB	LQFP 80pin-0.5p	Cu	Tray
R5F10BMECKFB#35Q	R5F10BMECKFB#3AQ	R5F10BMECKFB#3AQ	F13(CAN/LIN)	64kB	LQFP 80pin-0.5p	Cu	Tray
R5F10BMECKFB#55	R5F10BMECKFB#5A	R5F10BMECKFB#3A	F13(CAN/LIN)	64kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10BMECKFB#55Q	R5F10BMECKFB#5AQ	R5F10BMECKFB#3AQ	F13(CAN/LIN)	64kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10BMECLFB#15	R5F10BMECLFB#1A	R5F10BMECLFB#3A	F13(CAN/LIN)	64kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10BMECLFB#15Q	R5F10BMECLFB#1AQ	R5F10BMECLFB#3AQ	F13(CAN/LIN)	64kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10BMECLFB#35	R5F10BMECLFB#3A	R5F10BMECLFB#3A	F13(CAN/LIN)	64kB	LQFP 80pin-0.5p	Cu	Tray
R5F10BMECLFB#35Q	R5F10BMECLFB#3AQ	R5F10BMECLFB#3AQ	F13(CAN/LIN)	64kB	LQFP 80pin-0.5p	Cu	Tray
R5F10BMECLFB#55	R5F10BMECLFB#5A	R5F10BMECLFB#3A	F13(CAN/LIN)	64kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10BMECLFB#55Q	R5F10BMECLFB#5AQ	R5F10BMECLFB#3AQ	F13(CAN/LIN)	64kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10BMFCKFB#15	R5F10BMFCKFB#1A	R5F10BMFCKFB#3A	F13(CAN/LIN)	96kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10BMFCKFB#15Q	R5F10BMFCKFB#1AQ	R5F10BMFCKFB#3AQ	F13(CAN/LIN)	96kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10BMFCKFB#35	R5F10BMFCKFB#3A	R5F10BMFCKFB#3A	F13(CAN/LIN)	96kB	LQFP 80pin-0.5p	Cu	Tray
R5F10BMFCKFB#35Q	R5F10BMFCKFB#3AQ	R5F10BMFCKFB#3AQ	F13(CAN/LIN)	96kB	LQFP 80pin-0.5p	Cu	Tray
R5F10BMFCKFB#55	R5F10BMFCKFB#5A	R5F10BMFCKFB#3A	F13(CAN/LIN)	96kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10BMFCKFB#55Q	R5F10BMFCKFB#5AQ	R5F10BMFCKFB#3AQ	F13(CAN/LIN)	96kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10BMFCLFB#15	R5F10BMFCLFB#1A	R5F10BMFCLFB#3A	F13(CAN/LIN)	96kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10BMFCLFB#15Q	R5F10BMFCLFB#1AQ	R5F10BMFCLFB#3AQ	F13(CAN/LIN)	96kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10BMFCLFB#35	R5F10BMFCLFB#3A	R5F10BMFCLFB#3A	F13(CAN/LIN)	96kB	LQFP 80pin-0.5p	Cu	Tray
R5F10BMFCLFB#35Q	R5F10BMFCLFB#3AQ	R5F10BMFCLFB#3AQ	F13(CAN/LIN)	96kB	LQFP 80pin-0.5p	Cu	Tray

R5F10BMFCLFB#55	R5F10BMFCLFB#5A	R5F10BMFCLFB#3A	F13(CAN/LIN)	96kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10BMFCLFB#55Q	R5F10BMFCLFB#5AQ	R5F10BMFCLFB#3AQ	F13(CAN/LIN)	96kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10BMGCKFB#15	R5F10BMGCKFB#1A	R5F10BMGCKFB#3A	F13(CAN/LIN)	128kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10BMGCKFB#15Q	R5F10BMGCKFB#1AQ	R5F10BMGCKFB#3AQ	F13(CAN/LIN)	128kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10BMGCKFB#35	R5F10BMGCKFB#3A	R5F10BMGCKFB#3A	F13(CAN/LIN)	128kB	LQFP 80pin-0.5p	Cu	Tray
R5F10BMGCKFB#35Q	R5F10BMGCKFB#3AQ	R5F10BMGCKFB#3AQ	F13(CAN/LIN)	128kB	LQFP 80pin-0.5p	Cu	Tray
R5F10BMGCKFB#55	R5F10BMGCKFB#5A	R5F10BMGCKFB#3A	F13(CAN/LIN)	128kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10BMGCKFB#55Q	R5F10BMGCKFB#5AQ	R5F10BMGCKFB#3AQ	F13(CAN/LIN)	128kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10BMGCLFB#15	R5F10BMGCLFB#1A	R5F10BMGCLFB#3A	F13(CAN/LIN)	128kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10BMGCLFB#15Q	R5F10BMGCLFB#1AQ	R5F10BMGCLFB#3AQ	F13(CAN/LIN)	128kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10BMGCLFB#35	R5F10BMGCLFB#3A	R5F10BMGCLFB#3A	F13(CAN/LIN)	128kB	LQFP 80pin-0.5p	Cu	Tray
R5F10BMGCLFB#35Q	R5F10BMGCLFB#3AQ	R5F10BMGCLFB#3AQ	F13(CAN/LIN)	128kB	LQFP 80pin-0.5p	Cu	Tray
R5F10BMGCLFB#55	R5F10BMGCLFB#5A	R5F10BMGCLFB#3A	F13(CAN/LIN)	128kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10BMGCLFB#55Q	R5F10BMGCLFB#5AQ	R5F10BMGCLFB#3AQ	F13(CAN/LIN)	128kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10PGDCKFB#15	R5F10PGDCKFB#1A	R5F10PGDCKFB#3A	F14	48kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10PGDCKFB#15Q	R5F10PGDCKFB#1AQ	R5F10PGDCKFB#3AQ	F14	48kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10PGDCKFB#35	R5F10PGDCKFB#3A	R5F10PGDCKFB#3A	F14	48kB	LQFP 48pin-0.5p	Cu	Tray
R5F10PGDCKFB#35Q	R5F10PGDCKFB#3AQ	R5F10PGDCKFB#3AQ	F14	48kB	LQFP 48pin-0.5p	Cu	Tray
R5F10PGDCKFB#55	R5F10PGDCKFB#5A	R5F10PGDCKFB#3A	F14	48kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10PGDCKFB#55Q	R5F10PGDCKFB#5AQ	R5F10PGDCKFB#3AQ	F14	48kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10PGDCLFB#15	R5F10PGDCLFB#1A	R5F10PGDCLFB#3A	F14	48kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10PGDCLFB#15Q	R5F10PGDCLFB#1AQ	R5F10PGDCLFB#3AQ	F14	48kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10PGDCLFB#35	R5F10PGDCLFB#3A	R5F10PGDCLFB#3A	F14	48kB	LQFP 48pin-0.5p	Cu	Tray
R5F10PGDCLFB#35Q	R5F10PGDCLFB#3AQ	R5F10PGDCLFB#3AQ	F14	48kB	LQFP 48pin-0.5p	Cu	Tray
R5F10PGDCLFB#55	R5F10PGDCLFB#5A	R5F10PGDCLFB#3A	F14	48kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10PGDCLFB#55Q	R5F10PGDCLFB#5AQ	R5F10PGDCLFB#3AQ	F14	48kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10PGECKFB#15	R5F10PGECKFB#1A	R5F10PGECKFB#3A	F14	64kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10PGECKFB#15Q	R5F10PGECKFB#1AQ	R5F10PGECKFB#3AQ	F14	64kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10PGECKFB#35	R5F10PGECKFB#3A	R5F10PGECKFB#3A	F14	64kB	LQFP 48pin-0.5p	Cu	Tray
R5F10PGECKFB#35Q	R5F10PGECKFB#3AQ	R5F10PGECKFB#3AQ	F14	64kB	LQFP 48pin-0.5p	Cu	Tray
R5F10PGECKFB#55	R5F10PGECKFB#5A	R5F10PGECKFB#3A	F14	64kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10PGECKFB#55Q	R5F10PGECKFB#5AQ	R5F10PGECKFB#3AQ	F14	64kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10PGECLFB#15	R5F10PGECLFB#1A	R5F10PGECLFB#3A	F14	64kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10PGECLFB#15Q	R5F10PGECLFB#1AQ	R5F10PGECLFB#3AQ	F14	64kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10PGECLFB#35	R5F10PGECLFB#3A	R5F10PGECLFB#3A	F14	64kB	LQFP 48pin-0.5p	Cu	Tray
R5F10PGECLFB#35Q	R5F10PGECLFB#3AQ	R5F10PGECLFB#3AQ	F14	64kB	LQFP 48pin-0.5p	Cu	Tray
R5F10PGECLFB#55	R5F10PGECLFB#5A	R5F10PGECLFB#3A	F14	64kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10PGECLFB#55Q	R5F10PGECLFB#5AQ	R5F10PGECLFB#3AQ	F14	64kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10PGFCKFB#15	R5F10PGFCKFB#1A	R5F10PGFCKFB#3A	F14	96kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10PGFCKFB#15Q	R5F10PGFCKFB#1AQ	R5F10PGFCKFB#3AQ	F14	96kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10PGFCKFB#35	R5F10PGFCKFB#3A	R5F10PGFCKFB#3A	F14	96kB	LQFP 48pin-0.5p	Cu	Tray
R5F10PGFCKFB#35Q	R5F10PGFCKFB#3AQ	R5F10PGFCKFB#3AQ	F14	96kB	LQFP 48pin-0.5p	Cu	Tray
R5F10PGFCKFB#55	R5F10PGFCKFB#5A	R5F10PGFCKFB#3A	F14	96kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10PGFCKFB#55Q	R5F10PGFCKFB#5AQ	R5F10PGFCKFB#3AQ	F14	96kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10PGFCLFB#15	R5F10PGFCLFB#1A	R5F10PGFCLFB#3A	F14	96kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10PGFCLFB#15Q	R5F10PGFCLFB#1AQ	R5F10PGFCLFB#3AQ	F14	96kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10PGFCLFB#35	R5F10PGFCLFB#3A	R5F10PGFCLFB#3A	F14	96kB	LQFP 48pin-0.5p	Cu	Tray
R5F10PGFCLFB#35Q	R5F10PGFCLFB#3AQ	R5F10PGFCLFB#3AQ	F14	96kB	LQFP 48pin-0.5p	Cu	Tray
R5F10PGFCLFB#55	R5F10PGFCLFB#5A	R5F10PGFCLFB#3A	F14	96kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10PGFCLFB#55Q	R5F10PGFCLFB#5AQ	R5F10PGFCLFB#3AQ	F14	96kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10PGGCKFB#15	R5F10PGGCKFB#1A	R5F10PGGCKFB#3A	F14	128kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10PGGCKFB#15Q	R5F10PGGCKFB#1AQ	R5F10PGGCKFB#3AQ	F14	128kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10PGGCKFB#35	R5F10PGGCKFB#3A	R5F10PGGCKFB#3A	F14	128kB	LQFP 48pin-0.5p	Cu	Tray
R5F10PGGCKFB#35Q	R5F10PGGCKFB#3AQ	R5F10PGGCKFB#3AQ	F14	128kB	LQFP 48pin-0.5p	Cu	Tray
R5F10PGGCKFB#55	R5F10PGGCKFB#5A	R5F10PGGCKFB#3A	F14	128kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10PGGCKFB#55Q	R5F10PGGCKFB#5AQ	R5F10PGGCKFB#3AQ	F14	128kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10PGGCLFB#15	R5F10PGGCLFB#1A	R5F10PGGCLFB#3A	F14	128kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10PGGCLFB#15Q	R5F10PGGCLFB#1AQ	R5F10PGGCLFB#3AQ	F14	128kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10PGGCLFB#35	R5F10PGGCLFB#3A	R5F10PGGCLFB#3A	F14	128kB	LQFP 48pin-0.5p	Cu	Tray
R5F10PGGCLFB#35Q	R5F10PGGCLFB#3AQ	R5F10PGGCLFB#3AQ	F14	128kB	LQFP 48pin-0.5p	Cu	Tray
R5F10PGGCLFB#55	R5F10PGGCLFB#5A	R5F10PGGCLFB#3A	F14	128kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10PGGCLFB#55Q	R5F10PGGCLFB#5AQ	R5F10PGGCLFB#3AQ	F14	128kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10PGHCKFB#15	R5F10PGHCKFB#1A	R5F10PGHCKFB#3A	F14	192kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10PGHCKFB#15Q	R5F10PGHCKFB#1AQ	R5F10PGHCKFB#3AQ	F14	192kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10PGHCKFB#35	R5F10PGHCKFB#3A	R5F10PGHCKFB#3A	F14	192kB	LQFP 48pin-0.5p	Cu	Tray
R5F10PGHCKFB#35Q	R5F10PGHCKFB#3AQ	R5F10PGHCKFB#3AQ	F14	192kB	LQFP 48pin-0.5p	Cu	Tray
R5F10PGHCKFB#55	R5F10PGHCKFB#5A	R5F10PGHCKFB#3A	F14	192kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10PGHCKFB#55Q	R5F10PGHCKFB#5AQ	R5F10PGHCKFB#3AQ	F14	192kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10PGHCLFB#15	R5F10PGHCLFB#1A	R5F10PGHCLFB#3A	F14	192kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10PGHCLFB#15Q	R5F10PGHCLFB#1AQ	R5F10PGHCLFB#3AQ	F14	192kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10PGHCLFB#35	R5F10PGHCLFB#3A	R5F10PGHCLFB#3A	F14	192kB	LQFP 48pin-0.5p	Cu	Tray
R5F10PGHCLFB#35Q	R5F10PGHCLFB#3AQ	R5F10PGHCLFB#3AQ	F14	192kB	LQFP 48pin-0.5p	Cu	Tray
R5F10PGHCLFB#55	R5F10PGHCLFB#5A	R5F10PGHCLFB#3A	F14	192kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10PGHCLFB#55Q	R5F10PGHCLFB#5AQ	R5F10PGHCLFB#3AQ	F14	192kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10PGJCKFB#15	R5F10PGJCKFB#1A	R5F10PGJCKFB#3A	F14	256kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10PGJCKFB#15Q	R5F10PGJCKFB#1AQ	R5F10PGJCKFB#3AQ	F14	256kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10PGJCKFB#35	R5F10PGJCKFB#3A	R5F10PGJCKFB#3A	F14	256kB	LQFP 48pin-0.5p	Cu	Tray
R5F10PGJCKFB#35Q	R5F10PGJCKFB#3AQ	R5F10PGJCKFB#3AQ	F14	256kB	LQFP 48pin-0.5p	Cu	Tray
R5F10PGJCKFB#55	R5F10PGJCKFB#5A	R5F10PGJCKFB#3A	F14	256kB	LQFP 48pin-0.5p	Cu	Tape&Reel

R5F10PGJCKFB#55Q	R5F10PGJCKFB#5AQ	R5F10PGJCKFB#3AQ	F14	256kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10PGJCLFB#15	R5F10PGJCLFB#1A	R5F10PGJCLFB#3A	F14	256kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10PGJCLFB#15Q	R5F10PGJCLFB#1AQ	R5F10PGJCLFB#3AQ	F14	256kB	LQFP 48pin-0.5p	Cu	Full Carton
R5F10PGJCLFB#35	R5F10PGJCLFB#3A	R5F10PGJCLFB#3A	F14	256kB	LQFP 48pin-0.5p	Cu	Tray
R5F10PGJCLFB#35Q	R5F10PGJCLFB#3AQ	R5F10PGJCLFB#3AQ	F14	256kB	LQFP 48pin-0.5p	Cu	Tray
R5F10PGJCLFB#55	R5F10PGJCLFB#5A	R5F10PGJCLFB#3A	F14	256kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10PGJCLFB#55Q	R5F10PGJCLFB#5AQ	R5F10PGJCLFB#3AQ	F14	256kB	LQFP 48pin-0.5p	Cu	Tape&Reel
R5F10PLECKFB#15	R5F10PLECKFB#1A	R5F10PLECKFB#3A	F14	64kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10PLECKFB#15Q	R5F10PLECKFB#1AQ	R5F10PLECKFB#3AQ	F14	64kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10PLECKFB#35	R5F10PLECKFB#3A	R5F10PLECKFB#3A	F14	64kB	LQFP 64pin-0.5p	Cu	Tray
R5F10PLECKFB#35Q	R5F10PLECKFB#3AQ	R5F10PLECKFB#3AQ	F14	64kB	LQFP 64pin-0.5p	Cu	Tray
R5F10PLECKFB#55	R5F10PLECKFB#5A	R5F10PLECKFB#3A	F14	64kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10PLECKFB#55Q	R5F10PLECKFB#5AQ	R5F10PLECKFB#3AQ	F14	64kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10PLECLFB#15	R5F10PLECLFB#1A	R5F10PLECLFB#3A	F14	64kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10PLECLFB#15Q	R5F10PLECLFB#1AQ	R5F10PLECLFB#3AQ	F14	64kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10PLECLFB#35	R5F10PLECLFB#3A	R5F10PLECLFB#3A	F14	64kB	LQFP 64pin-0.5p	Cu	Tray
R5F10PLECLFB#35Q	R5F10PLECLFB#3AQ	R5F10PLECLFB#3AQ	F14	64kB	LQFP 64pin-0.5p	Cu	Tray
R5F10PLECLFB#55	R5F10PLECLFB#5A	R5F10PLECLFB#3A	F14	64kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10PLECLFB#55Q	R5F10PLECLFB#5AQ	R5F10PLECLFB#3AQ	F14	64kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10PLFCKFB#15	R5F10PLFCKFB#1A	R5F10PLFCKFB#3A	F14	96kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10PLFCKFB#15Q	R5F10PLFCKFB#1AQ	R5F10PLFCKFB#3AQ	F14	96kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10PLFCKFB#35	R5F10PLFCKFB#3A	R5F10PLFCKFB#3A	F14	96kB	LQFP 64pin-0.5p	Cu	Tray
R5F10PLFCKFB#35Q	R5F10PLFCKFB#3AQ	R5F10PLFCKFB#3AQ	F14	96kB	LQFP 64pin-0.5p	Cu	Tray
R5F10PLFCKFB#55	R5F10PLFCKFB#5A	R5F10PLFCKFB#3A	F14	96kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10PLFCKFB#55Q	R5F10PLFCKFB#5AQ	R5F10PLFCKFB#3AQ	F14	96kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10PLFCLFB#15	R5F10PLFCLFB#1A	R5F10PLFCLFB#3A	F14	96kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10PLFCLFB#15Q	R5F10PLFCLFB#1AQ	R5F10PLFCLFB#3AQ	F14	96kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10PLFCLFB#35	R5F10PLFCLFB#3A	R5F10PLFCLFB#3A	F14	96kB	LQFP 64pin-0.5p	Cu	Tray
R5F10PLFCLFB#35Q	R5F10PLFCLFB#3AQ	R5F10PLFCLFB#3AQ	F14	96kB	LQFP 64pin-0.5p	Cu	Tray
R5F10PLFCLFB#55	R5F10PLFCLFB#5A	R5F10PLFCLFB#3A	F14	96kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10PLFCLFB#55Q	R5F10PLFCLFB#5AQ	R5F10PLFCLFB#3AQ	F14	96kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10PLGCKFB#15	R5F10PLGCKFB#1A	R5F10PLGCKFB#3A	F14	128kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10PLGCKFB#15Q	R5F10PLGCKFB#1AQ	R5F10PLGCKFB#3AQ	F14	128kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10PLGCKFB#35	R5F10PLGCKFB#3A	R5F10PLGCKFB#3A	F14	128kB	LQFP 64pin-0.5p	Cu	Tray
R5F10PLGCKFB#35Q	R5F10PLGCKFB#3AQ	R5F10PLGCKFB#3AQ	F14	128kB	LQFP 64pin-0.5p	Cu	Tray
R5F10PLGCKFB#55	R5F10PLGCKFB#5A	R5F10PLGCKFB#3A	F14	128kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10PLGCKFB#55Q	R5F10PLGCKFB#5AQ	R5F10PLGCKFB#3AQ	F14	128kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10PLGCLFB#15	R5F10PLGCLFB#1A	R5F10PLGCLFB#3A	F14	128kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10PLGCLFB#15Q	R5F10PLGCLFB#1AQ	R5F10PLGCLFB#3AQ	F14	128kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10PLGCLFB#35	R5F10PLGCLFB#3A	R5F10PLGCLFB#3A	F14	128kB	LQFP 64pin-0.5p	Cu	Tray
R5F10PLGCLFB#35Q	R5F10PLGCLFB#3AQ	R5F10PLGCLFB#3AQ	F14	128kB	LQFP 64pin-0.5p	Cu	Tray
R5F10PLGCLFB#55	R5F10PLGCLFB#5A	R5F10PLGCLFB#3A	F14	128kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10PLGCLFB#55Q	R5F10PLGCLFB#5AQ	R5F10PLGCLFB#3AQ	F14	128kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10PLHCKFB#15	R5F10PLHCKFB#1A	R5F10PLHCKFB#3A	F14	192kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10PLHCKFB#15Q	R5F10PLHCKFB#1AQ	R5F10PLHCKFB#3AQ	F14	192kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10PLHCKFB#35	R5F10PLHCKFB#3A	R5F10PLHCKFB#3A	F14	192kB	LQFP 64pin-0.5p	Cu	Tray
R5F10PLHCKFB#35Q	R5F10PLHCKFB#3AQ	R5F10PLHCKFB#3AQ	F14	192kB	LQFP 64pin-0.5p	Cu	Tray
R5F10PLHCKFB#55	R5F10PLHCKFB#5A	R5F10PLHCKFB#3A	F14	192kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10PLHCKFB#55Q	R5F10PLHCKFB#5AQ	R5F10PLHCKFB#3AQ	F14	192kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10PLHCLFB#15	R5F10PLHCLFB#1A	R5F10PLHCLFB#3A	F14	192kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10PLHCLFB#15Q	R5F10PLHCLFB#1AQ	R5F10PLHCLFB#3AQ	F14	192kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10PLHCLFB#35	R5F10PLHCLFB#3A	R5F10PLHCLFB#3A	F14	192kB	LQFP 64pin-0.5p	Cu	Tray
R5F10PLHCLFB#35Q	R5F10PLHCLFB#3AQ	R5F10PLHCLFB#3AQ	F14	192kB	LQFP 64pin-0.5p	Cu	Tray
R5F10PLHCLFB#55	R5F10PLHCLFB#5A	R5F10PLHCLFB#3A	F14	192kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10PLHCLFB#55Q	R5F10PLHCLFB#5AQ	R5F10PLHCLFB#3AQ	F14	192kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10PLJCKFB#15	R5F10PLJCKFB#1A	R5F10PLJCKFB#3A	F14	256kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10PLJCKFB#15Q	R5F10PLJCKFB#1AQ	R5F10PLJCKFB#3AQ	F14	256kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10PLJCKFB#35	R5F10PLJCKFB#3A	R5F10PLJCKFB#3A	F14	256kB	LQFP 64pin-0.5p	Cu	Tray
R5F10PLJCKFB#35Q	R5F10PLJCKFB#3AQ	R5F10PLJCKFB#3AQ	F14	256kB	LQFP 64pin-0.5p	Cu	Tray
R5F10PLJCKFB#55	R5F10PLJCKFB#5A	R5F10PLJCKFB#3A	F14	256kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10PLJCKFB#55Q	R5F10PLJCKFB#5AQ	R5F10PLJCKFB#3AQ	F14	256kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10PLJCLFB#15	R5F10PLJCLFB#1A	R5F10PLJCLFB#3A	F14	256kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10PLJCLFB#15Q	R5F10PLJCLFB#1AQ	R5F10PLJCLFB#3AQ	F14	256kB	LQFP 64pin-0.5p	Cu	Full Carton
R5F10PLJCLFB#35	R5F10PLJCLFB#3A	R5F10PLJCLFB#3A	F14	256kB	LQFP 64pin-0.5p	Cu	Tray
R5F10PLJCLFB#35Q	R5F10PLJCLFB#3AQ	R5F10PLJCLFB#3AQ	F14	256kB	LQFP 64pin-0.5p	Cu	Tray
R5F10PLJCLFB#55	R5F10PLJCLFB#5A	R5F10PLJCLFB#3A	F14	256kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10PLJCLFB#55Q	R5F10PLJCLFB#5AQ	R5F10PLJCLFB#3AQ	F14	256kB	LQFP 64pin-0.5p	Cu	Tape&Reel
R5F10PMECKFB#15	R5F10PMECKFB#1A	R5F10PMECKFB#3A	F14	64kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10PMECKFB#15Q	R5F10PMECKFB#1AQ	R5F10PMECKFB#3AQ	F14	64kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10PMECKFB#35	R5F10PMECKFB#3A	R5F10PMECKFB#3A	F14	64kB	LQFP 80pin-0.5p	Cu	Tray
R5F10PMECKFB#35Q	R5F10PMECKFB#3AQ	R5F10PMECKFB#3AQ	F14	64kB	LQFP 80pin-0.5p	Cu	Tray
R5F10PMECKFB#55	R5F10PMECKFB#5A	R5F10PMECKFB#3A	F14	64kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10PMECKFB#55Q	R5F10PMECKFB#5AQ	R5F10PMECKFB#3AQ	F14	64kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10PMECLFB#15	R5F10PMECLFB#1A	R5F10PMECLFB#3A	F14	64kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10PMECLFB#15Q	R5F10PMECLFB#1AQ	R5F10PMECLFB#3AQ	F14	64kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10PMECLFB#35	R5F10PMECLFB#3A	R5F10PMECLFB#3A	F14	64kB	LQFP 80pin-0.5p	Cu	Tray
R5F10PMECLFB#35Q	R5F10PMECLFB#3AQ	R5F10PMECLFB#3AQ	F14	64kB	LQFP 80pin-0.5p	Cu	Tray
R5F10PMECLFB#55	R5F10PMECLFB#5A	R5F10PMECLFB#3A	F14	64kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10PMECLFB#55Q	R5F10PMECLFB#5AQ	R5F10PMECLFB#3AQ	F14	64kB	LQFP 80pin-0.5p	Cu	Tape&Reel

R5F10PMFCKFB#15	R5F10PMFCKFB#1A	R5F10PMFCKFB#3A	F14	96kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10PMFCKFB#15Q	R5F10PMFCKFB#1AQ	R5F10PMFCKFB#3AQ	F14	96kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10PMFCKFB#35	R5F10PMFCKFB#3A	R5F10PMFCKFB#3A	F14	96kB	LQFP 80pin-0.5p	Cu	Tray
R5F10PMFCKFB#35Q	R5F10PMFCKFB#3AQ	R5F10PMFCKFB#3AQ	F14	96kB	LQFP 80pin-0.5p	Cu	Tray
R5F10PMFCKFB#55	R5F10PMFCKFB#5A	R5F10PMFCKFB#3A	F14	96kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10PMFCKFB#55Q	R5F10PMFCKFB#5AQ	R5F10PMFCKFB#3AQ	F14	96kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10PMFCLFB#15	R5F10PMFCLFB#1A	R5F10PMFCLFB#3A	F14	96kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10PMFCLFB#15Q	R5F10PMFCLFB#1AQ	R5F10PMFCLFB#3AQ	F14	96kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10PMFCLFB#35	R5F10PMFCLFB#3A	R5F10PMFCLFB#3A	F14	96kB	LQFP 80pin-0.5p	Cu	Tray
R5F10PMFCLFB#35Q	R5F10PMFCLFB#3AQ	R5F10PMFCLFB#3AQ	F14	96kB	LQFP 80pin-0.5p	Cu	Tray
R5F10PMFCLFB#55	R5F10PMFCLFB#5A	R5F10PMFCLFB#3A	F14	96kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10PMFCLFB#55Q	R5F10PMFCLFB#5AQ	R5F10PMFCLFB#3AQ	F14	96kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10PMGCKFB#15	R5F10PMGCKFB#1A	R5F10PMGCKFB#3A	F14	128kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10PMGCKFB#15Q	R5F10PMGCKFB#1AQ	R5F10PMGCKFB#3AQ	F14	128kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10PMGCKFB#35	R5F10PMGCKFB#3A	R5F10PMGCKFB#3A	F14	128kB	LQFP 80pin-0.5p	Cu	Tray
R5F10PMGCKFB#35Q	R5F10PMGCKFB#3AQ	R5F10PMGCKFB#3AQ	F14	128kB	LQFP 80pin-0.5p	Cu	Tray
R5F10PMGCKFB#55	R5F10PMGCKFB#5A	R5F10PMGCKFB#3A	F14	128kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10PMGCKFB#55Q	R5F10PMGCKFB#5AQ	R5F10PMGCKFB#3AQ	F14	128kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10PMGCLFB#15	R5F10PMGCLFB#1A	R5F10PMGCLFB#3A	F14	128kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10PMGCLFB#15Q	R5F10PMGCLFB#1AQ	R5F10PMGCLFB#3AQ	F14	128kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10PMGCLFB#35	R5F10PMGCLFB#3A	R5F10PMGCLFB#3A	F14	128kB	LQFP 80pin-0.5p	Cu	Tray
R5F10PMGCLFB#35Q	R5F10PMGCLFB#3AQ	R5F10PMGCLFB#3AQ	F14	128kB	LQFP 80pin-0.5p	Cu	Tray
R5F10PMGCLFB#55	R5F10PMGCLFB#5A	R5F10PMGCLFB#3A	F14	128kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10PMGCLFB#55Q	R5F10PMGCLFB#5AQ	R5F10PMGCLFB#3AQ	F14	128kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10PMHCKFB#15	R5F10PMHCKFB#1A	R5F10PMHCKFB#3A	F14	192kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10PMHCKFB#15Q	R5F10PMHCKFB#1AQ	R5F10PMHCKFB#3AQ	F14	192kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10PMHCKFB#35	R5F10PMHCKFB#3A	R5F10PMHCKFB#3A	F14	192kB	LQFP 80pin-0.5p	Cu	Tray
R5F10PMHCKFB#35Q	R5F10PMHCKFB#3AQ	R5F10PMHCKFB#3AQ	F14	192kB	LQFP 80pin-0.5p	Cu	Tray
R5F10PMHCKFB#55	R5F10PMHCKFB#5A	R5F10PMHCKFB#3A	F14	192kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10PMHCKFB#55Q	R5F10PMHCKFB#5AQ	R5F10PMHCKFB#3AQ	F14	192kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10PMHCLFB#15	R5F10PMHCLFB#1A	R5F10PMHCLFB#3A	F14	192kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10PMHCLFB#15Q	R5F10PMHCLFB#1AQ	R5F10PMHCLFB#3AQ	F14	192kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10PMHCLFB#35	R5F10PMHCLFB#3A	R5F10PMHCLFB#3A	F14	192kB	LQFP 80pin-0.5p	Cu	Tray
R5F10PMHCLFB#35Q	R5F10PMHCLFB#3AQ	R5F10PMHCLFB#3AQ	F14	192kB	LQFP 80pin-0.5p	Cu	Tray
R5F10PMHCLFB#55	R5F10PMHCLFB#5A	R5F10PMHCLFB#3A	F14	192kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10PMHCLFB#55Q	R5F10PMHCLFB#5AQ	R5F10PMHCLFB#3AQ	F14	192kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10PMJCKFB#15	R5F10PMJCKFB#1A	R5F10PMJCKFB#3A	F14	256kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10PMJCKFB#15Q	R5F10PMJCKFB#1AQ	R5F10PMJCKFB#3AQ	F14	256kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10PMJCKFB#35	R5F10PMJCKFB#3A	R5F10PMJCKFB#3A	F14	256kB	LQFP 80pin-0.5p	Cu	Tray
R5F10PMJCKFB#35Q	R5F10PMJCKFB#3AQ	R5F10PMJCKFB#3AQ	F14	256kB	LQFP 80pin-0.5p	Cu	Tray
R5F10PMJCKFB#55	R5F10PMJCKFB#5A	R5F10PMJCKFB#3A	F14	256kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10PMJCKFB#55Q	R5F10PMJCKFB#5AQ	R5F10PMJCKFB#3AQ	F14	256kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10PMJCLFB#15	R5F10PMJCLFB#1A	R5F10PMJCLFB#3A	F14	256kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10PMJCLFB#15Q	R5F10PMJCLFB#1AQ	R5F10PMJCLFB#3AQ	F14	256kB	LQFP 80pin-0.5p	Cu	Full Carton
R5F10PMJCLFB#35	R5F10PMJCLFB#3A	R5F10PMJCLFB#3A	F14	256kB	LQFP 80pin-0.5p	Cu	Tray
R5F10PMJCLFB#35Q	R5F10PMJCLFB#3AQ	R5F10PMJCLFB#3AQ	F14	256kB	LQFP 80pin-0.5p	Cu	Tray
R5F10PMJCLFB#55	R5F10PMJCLFB#5A	R5F10PMJCLFB#3A	F14	256kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10PMJCLFB#55Q	R5F10PMJCLFB#5AQ	R5F10PMJCLFB#3AQ	F14	256kB	LQFP 80pin-0.5p	Cu	Tape&Reel
R5F10PPECKFB#15	R5F10PPECKFB#1A	R5F10PPECKFB#3A	F14	64kB	LQFP 100pin-0.5p	Cu	Full Carton
R5F10PPECKFB#15Q	R5F10PPECKFB#1AQ	R5F10PPECKFB#3AQ	F14	64kB	LQFP 100pin-0.5p	Cu	Full Carton
R5F10PPECKFB#35	R5F10PPECKFB#3A	R5F10PPECKFB#3A	F14	64kB	LQFP 100pin-0.5p	Cu	Tray
R5F10PPECKFB#35Q	R5F10PPECKFB#3AQ	R5F10PPECKFB#3AQ	F14	64kB	LQFP 100pin-0.5p	Cu	Tray
R5F10PPECKFB#55	R5F10PPECKFB#5A	R5F10PPECKFB#3A	F14	64kB	LQFP 100pin-0.5p	Cu	Tape&Reel
R5F10PPECKFB#55Q	R5F10PPECKFB#5AQ	R5F10PPECKFB#3AQ	F14	64kB	LQFP 100pin-0.5p	Cu	Tape&Reel
R5F10PPECLFB#15	R5F10PPECLFB#1A	R5F10PPECLFB#3A	F14	64kB	LQFP 100pin-0.5p	Cu	Full Carton
R5F10PPECLFB#15Q	R5F10PPECLFB#1AQ	R5F10PPECLFB#3AQ	F14	64kB	LQFP 100pin-0.5p	Cu	Full Carton
R5F10PPECLFB#35	R5F10PPECLFB#3A	R5F10PPECLFB#3A	F14	64kB	LQFP 100pin-0.5p	Cu	Tray
R5F10PPECLFB#35Q	R5F10PPECLFB#3AQ	R5F10PPECLFB#3AQ	F14	64kB	LQFP 100pin-0.5p	Cu	Tray
R5F10PPECLFB#55	R5F10PPECLFB#5A	R5F10PPECLFB#3A	F14	64kB	LQFP 100pin-0.5p	Cu	Tape&Reel
R5F10PPECLFB#55Q	R5F10PPECLFB#5AQ	R5F10PPECLFB#3AQ	F14	64kB	LQFP 100pin-0.5p	Cu	Tape&Reel
R5F10PPFCKFB#15	R5F10PPFCKFB#1A	R5F10PPFCKFB#3A	F14	96kB	LQFP 100pin-0.5p	Cu	Full Carton
R5F10PPFCKFB#15Q	R5F10PPFCKFB#1AQ	R5F10PPFCKFB#3AQ	F14	96kB	LQFP 100pin-0.5p	Cu	Full Carton
R5F10PPFCKFB#35	R5F10PPFCKFB#3A	R5F10PPFCKFB#3A	F14	96kB	LQFP 100pin-0.5p	Cu	Tray
R5F10PPFCKFB#35Q	R5F10PPFCKFB#3AQ	R5F10PPFCKFB#3AQ	F14	96kB	LQFP 100pin-0.5p	Cu	Tray
R5F10PPFCKFB#55	R5F10PPFCKFB#5A	R5F10PPFCKFB#3A	F14	96kB	LQFP 100pin-0.5p	Cu	Tape&Reel
R5F10PPFCKFB#55Q	R5F10PPFCKFB#5AQ	R5F10PPFCKFB#3AQ	F14	96kB	LQFP 100pin-0.5p	Cu	Tape&Reel
R5F10PPFCLFB#15	R5F10PPFCLFB#1A	R5F10PPFCLFB#3A	F14	96kB	LQFP 100pin-0.5p	Cu	Full Carton
R5F10PPFCLFB#15Q	R5F10PPFCLFB#1AQ	R5F10PPFCLFB#3AQ	F14	96kB	LQFP 100pin-0.5p	Cu	Full Carton
R5F10PPFCLFB#35	R5F10PPFCLFB#3A	R5F10PPFCLFB#3A	F14	96kB	LQFP 100pin-0.5p	Cu	Tray
R5F10PPFCLFB#35Q	R5F10PPFCLFB#3AQ	R5F10PPFCLFB#3AQ	F14	96kB	LQFP 100pin-0.5p	Cu	Tray
R5F10PPFCLFB#55	R5F10PPFCLFB#5A	R5F10PPFCLFB#3A	F14	96kB	LQFP 100pin-0.5p	Cu	Tape&Reel
R5F10PPFCLFB#55Q	R5F10PPFCLFB#5AQ	R5F10PPFCLFB#3AQ	F14	96kB	LQFP 100pin-0.5p	Cu	Tape&Reel
R5F10PPGCKFB#15	R5F10PPGCKFB#1A	R5F10PPGCKFB#3A	F14	128kB	LQFP 100pin-0.5p	Cu	Full Carton
R5F10PPGCKFB#15Q	R5F10PPGCKFB#1AQ	R5F10PPGCKFB#3AQ	F14	128kB	LQFP 100pin-0.5p	Cu	Full Carton
R5F10PPGCKFB#35	R5F10PPGCKFB#3A	R5F10PPGCKFB#3A	F14	128kB	LQFP 100pin-0.5p	Cu	Tray
R5F10PPGCKFB#35Q	R5F10PPGCKFB#3AQ	R5F10PPGCKFB#3AQ	F14	128kB	LQFP 100pin-0.5p	Cu	Tray
R5F10PPGCKFB#55	R5F10PPGCKFB#5A	R5F10PPGCKFB#3A	F14	128kB	LQFP 100pin-0.5p	Cu	Tape&Reel
R5F10PPGCKFB#55Q	R5F10PPGCKFB#5AQ	R5F10PPGCKFB#3AQ	F14	128kB	LQFP 100pin-0.5p	Cu	Tape&Reel
R5F10PPGCLFB#15	R5F10PPGCLFB#1A	R5F10PPGCLFB#3A	F14	128kB	LQFP 100pin-0.5p	Cu	Full Carton

R5F10PPGCLFB#15Q	R5F10PPGCLFB#1AQ	R5F10PPGCLFB#3AQ	F14	128kB	LQFP 100pin-0.5p	Cu	Full Carton
R5F10PPGCLFB#35	R5F10PPGCLFB#3A	R5F10PPGCLFB#3A	F14	128kB	LQFP 100pin-0.5p	Cu	Tray
R5F10PPGCLFB#35Q	R5F10PPGCLFB#3AQ	R5F10PPGCLFB#3AQ	F14	128kB	LQFP 100pin-0.5p	Cu	Tray
R5F10PPGCLFB#55	R5F10PPGCLFB#5A	R5F10PPGCLFB#3A	F14	128kB	LQFP 100pin-0.5p	Cu	Tape&Reel
R5F10PPGCLFB#55Q	R5F10PPGCLFB#5AQ	R5F10PPGCLFB#3AQ	F14	128kB	LQFP 100pin-0.5p	Cu	Tape&Reel
R5F10PPHCKFB#15	R5F10PPHCKFB#1A	R5F10PPHCKFB#3A	F14	192kB	LQFP 100pin-0.5p	Cu	Full Carton
R5F10PPHCKFB#15Q	R5F10PPHCKFB#1AQ	R5F10PPHCKFB#3AQ	F14	192kB	LQFP 100pin-0.5p	Cu	Full Carton
R5F10PPHCKFB#35	R5F10PPHCKFB#3A	R5F10PPHCKFB#3A	F14	192kB	LQFP 100pin-0.5p	Cu	Tray
R5F10PPHCKFB#35Q	R5F10PPHCKFB#3AQ	R5F10PPHCKFB#3AQ	F14	192kB	LQFP 100pin-0.5p	Cu	Tray
R5F10PPHCKFB#55	R5F10PPHCKFB#5A	R5F10PPHCKFB#3A	F14	192kB	LQFP 100pin-0.5p	Cu	Tape&Reel
R5F10PPHCKFB#55Q	R5F10PPHCKFB#5AQ	R5F10PPHCKFB#3AQ	F14	192kB	LQFP 100pin-0.5p	Cu	Tape&Reel
R5F10PPHCLFB#15	R5F10PPHCLFB#1A	R5F10PPHCLFB#3A	F14	192kB	LQFP 100pin-0.5p	Cu	Full Carton
R5F10PPHCLFB#15Q	R5F10PPHCLFB#1AQ	R5F10PPHCLFB#3AQ	F14	192kB	LQFP 100pin-0.5p	Cu	Full Carton
R5F10PPHCLFB#35	R5F10PPHCLFB#3A	R5F10PPHCLFB#3A	F14	192kB	LQFP 100pin-0.5p	Cu	Tray
R5F10PPHCLFB#35Q	R5F10PPHCLFB#3AQ	R5F10PPHCLFB#3AQ	F14	192kB	LQFP 100pin-0.5p	Cu	Tray
R5F10PPHCLFB#55	R5F10PPHCLFB#5A	R5F10PPHCLFB#3A	F14	192kB	LQFP 100pin-0.5p	Cu	Tape&Reel
R5F10PPHCLFB#55Q	R5F10PPHCLFB#5AQ	R5F10PPHCLFB#3AQ	F14	192kB	LQFP 100pin-0.5p	Cu	Tape&Reel
R5F10PPJCKFB#15	R5F10PPJCKFB#1A	R5F10PPJCKFB#3A	F14	256kB	LQFP 100pin-0.5p	Cu	Full Carton
R5F10PPJCKFB#15Q	R5F10PPJCKFB#1AQ	R5F10PPJCKFB#3AQ	F14	256kB	LQFP 100pin-0.5p	Cu	Full Carton
R5F10PPJCKFB#35	R5F10PPJCKFB#3A	R5F10PPJCKFB#3A	F14	256kB	LQFP 100pin-0.5p	Cu	Tray
R5F10PPJCKFB#35Q	R5F10PPJCKFB#3AQ	R5F10PPJCKFB#3AQ	F14	256kB	LQFP 100pin-0.5p	Cu	Tray
R5F10PPJCKFB#55	R5F10PPJCKFB#5A	R5F10PPJCKFB#3A	F14	256kB	LQFP 100pin-0.5p	Cu	Tape&Reel
R5F10PPJCKFB#55Q	R5F10PPJCKFB#5AQ	R5F10PPJCKFB#3AQ	F14	256kB	LQFP 100pin-0.5p	Cu	Tape&Reel
R5F10PPJCLFB#15	R5F10PPJCLFB#1A	R5F10PPJCLFB#3A	F14	256kB	LQFP 100pin-0.5p	Cu	Full Carton
R5F10PPJCLFB#15Q	R5F10PPJCLFB#1AQ	R5F10PPJCLFB#3AQ	F14	256kB	LQFP 100pin-0.5p	Cu	Full Carton
R5F10PPJCLFB#35	R5F10PPJCLFB#3A	R5F10PPJCLFB#3A	F14	256kB	LQFP 100pin-0.5p	Cu	Tray
R5F10PPJCLFB#35Q	R5F10PPJCLFB#3AQ	R5F10PPJCLFB#3AQ	F14	256kB	LQFP 100pin-0.5p	Cu	Tray
R5F10PPJCLFB#55	R5F10PPJCLFB#5A	R5F10PPJCLFB#3A	F14	256kB	LQFP 100pin-0.5p	Cu	Tape&Reel
R5F10PPJCLFB#55Q	R5F10PPJCLFB#5AQ	R5F10PPJCLFB#3AQ	F14	256kB	LQFP 100pin-0.5p	Cu	Tape&Reel

Report No. MCR-22-0669
Date: 28/Sep./2022

RENESAS SEMICONDUCTOR
RELIABILITY REPORT

SERIES : RL78/F13,F14

DEVICE : Please see [Device list]

APPLICATION : Automobile

<Wefer Fabrication>
Renesas Semiconductor Manufacturing Co., Ltd. Naka Factory

<Assembly>
Renesas Semiconductor KL Sdn. Bhd.

Quality Assurance Div.
Renesas Electronics Corporation

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(Rev.5.0-2 October 2020)

Q100 Qualification Test Results

[Note : Basically qualification tests were performed using a representative product with the same wafer process and the same package structure .]

Test	#	Reference	Test Conditions		Lots	S.S.	Total	Results (Fail of Total)	Comments: (N/A =Not Applicable)
TEST GROUP A – ACCELERATED ENVIRONMENT STRESS TESTS									
PC	A1	JESD22 A113 J-STD-020	Preconditioning: (Test @ Rm) SMD only; Moisture Preconditioning for THB/HAST, AC/UHST, TC, &PTC ; Peak Reflow Temp=260°C		Min.MSL=3			MSL=3	-
THB ~~or~~ ~~HAST~~	A2	JESD22 A101	Temperature Humidity Bias: (Test @ Rm/Hot) Ta=85°C, RH=85%, 1000hrs		3	77	231	0 of 231	-
~~AC or~~ UHST ~~or TH~~	A3	JESD22 A118	Unbiased Highly Accelerated Stree Test: (Test @ Rm) Ta=110°C, 85% RH, 264h		3	77	231	0 of 231	-
TC	A4	JESD22 A104	Temperature Cycle: (Test @ Hot) Ta=-65°C to 150°C, 500cyc Wire Bond Pull: (0 Fails after TC)		3	77	231	0 of 231 0 Fails after TC (WBP)	-
PTC	A5	JESD22 A105	Power Temperature Cycle: (Test @ Rm/Hot) -		-	-	-	-	N/A
HTSL	A6	JESD22 A103	High Temperature Storage Life: (Test @ Rm/Hot) Ta=150°C, 1000hrs		3	45	135	0 of 135	-
TEST GROUP B – ACCELERATED LIFETIME SIMULATION TESTS									
HTOL	B1	JESD22 A108	High Temp Operating Life: (Test @ Rm/Cold/Hot) Ta=125°C, 1000hrs		3	77	231	0 of 231	-
ELFR	B2	AEC-Q100-008	Early Life Failure Rate: (Test @ Rm/Hot) Ta=125°C, 48hrs		3	800	2400	0 of 2400	-
EDR	B3	AEC-Q100-005	NVM Endurance & Data Retention Test: (Test @ Rm/Hot)	For HTOL	3	77	231	0 of 231	-
				For HTSL	3	45	135	0 of 135	-

Test	#	Reference	Test Conditions	Lots	S.S.	Total	Results (Fail of Total)	Comments: (N/A =Not Applicable)
TEST GROUP C – PACKAGE ASSEMBLY INTEGRITY TESTS								
WBS	C1	AEC-Q100-001 AEC-Q003	Wire Bond Shear Test: (Cpk > 1.67)	30 bonds	5 parts Min.	30 bonds	0 of 30bonds	Cpk>1.67
WBP	C2	Mil-STD-883 Method 2011 AEC-Q003	Wire Bond Pull: (Cpk > 1.67); Each bonder used	30 bonds	5 parts Min.	30 bonds	0 of 30bonds	Cpk>1.67
SD	C3	JESD22 B102 JSTD-002D	Solderability: (>95% coverage) 8 hr steam aging prior to testing	1	15	15	0 of 15	-
PD	C4	JESD22 B100, JESD22 B108 AEC-Q003	Physical Dimensions: (Cpk > 1.67)	3	10	30	0 of 30	Cpk>1.67
SBS	C5	AEC-Q100-010 AEC-Q003	Solder Ball Shear: (Cpk > 1.67); 5 balls from min. of 10 devices	-	-	-	-	N/A
LI	C6	JESD22 B105	Lead Integrity: (No lead cracking or breaking); Through-hole only; 10 leads from each of 5 devices	-	-	-	-	N/A
TEST GROUP D – DIE FABRICATION RELIABILITY TESTS								
EM	D1	JESD61	Electromigration:	-	-	-	Pass	Confirmed by process TEG
TDDB	D2	JESD35	Time Dependant Dielectric Breakdown:	-	-	-	Pass	Confirmed by process TEG
HCI	D3	JESD60 & 28	Hot Carrier Injection:	-	-	-	Pass	Confirmed by process TEG
NBTI	D4	JESD90	Negative Bias Temperature Instability:	-	-	-	Pass	Confirmed by process TEG
SM	D5	JESD61,87 & 202	Stress Migration:	-	-	-	Pass	Confirmed by process TEG

Test	#	Reference	Test Conditions	Lots	S.S.	Total	Results (Fail of Total)	Comments: (N/A =Not Applicable)
TEST GROUP E- ELECTRICAL VERIFICATION								
TEST	E1	User/Supplier Specification	Pre and Post Stress Electrical Test:	All	All	All	0 of All	-
HBM	E2	AEC-Q100-002	Electrostatic Discharge, Human Body Model: (Test @ Rm/Hot); (2KV HBM / Class 2 or better)	1	3	3	0 of 3 ESD Level= HBM:2	HBM>2KV
CDM	E3	AEC-Q100-011	Electrostatic Discharge, Charged Device Model: (Test @ Rm/Hot); (750V corner leads, 500V all other leads / Class C4B or better)	1	3	3	0 of 3 ESD Level= CDM:C4B	Corner leads: 750V Pass All other leads:500V Pass
LU	E4	AEC-Q100-004	Latch-Up: (Test @ Rm/Hot)	1	6	6	0 of 6	-
ED	E5	AEC-Q100-009 AEC-Q003	Electrical Distributions: (Test @ Rm/Hot/Cold) (where applicable, Cpk>1.67)	3	30	90	0 of 90	-
FG	E6	AEC-Q100-007	Fault Grading:	-	-	-	>98%	-
CHAR	E7	AEC-Q003	Characterization: (Test @ Rm/Hot/Cold)	-	-	-	Pass	According to Renesas standard procedure
EMC	E9	SAE J1752/3	Electromagnetic Compatibility (Radiated Emissions)	1	1	1	0 of 1	-
SC	E10	AEC Q100-012	Short Circuit Characterization	-	-	-	-	N/A
SER	E11	JESD89-1 JESD89-2 JESD89-3	Soft Error Rate	-	-	-	Pass	Performed by process TEG
LF	E12	AEC-Q005	Lead (Pb) Free: (see AEC-Q005)	-	-	-	Pass	Solderability: See SD (C3) result. Solder heat resistance: N/A (Wave Solder is Not recommended.) Whisker: Performed on product TEG with test method based on JESD201.

Test	#	Reference	Test Conditions	Lots	S.S.	Total	Results (Fail of Total)	Comments: (N/A =Not Applicable)
TEST GROUP F – DEFECT SCREENING TESTS								
PAT	F1	AEC-Q001	Process Average Testing: (see AEC-Q001)	All	All	All	Reject units outside PAT limits	Apply to mass production according to Renesas standard procedure
SBA	F2	AEC-Q002	Statistical Bin/Yield Analysis: (see AEC-Q002)	All	All	All	Reject units outside criteria	Apply to mass production according to Renesas standard procedure
TEST GROUP G – CAVITY PACKAGE INTEGRITY TESTS (for Ceramic Package testing only)								
MS	G1	JESD22 B104	Mechanical Shock: (Test @ Rm)	-	-	-	-	N/A
VFV	G2	JESD22 B103	Variable Frequency Vibration: (Test @ Rm)	-	-	-	-	N/A
CA	G3	MIL-STD-883 Method 2001	Constant Acceleration: (Test @ Rm)	-	-	-	-	N/A
GFL	G4	MIL-STD-883 Method 1014	Gross and Fine Leak:	-	-	-	-	N/A
DROP	G5	----------	Drop Test: (Test @ Rm) MEMS cavity parts only. Drop part on each of 6 axes once from a height of 1.2m onto a concrete surface.	-	-	-	-	N/A
LT	G6	MIL-STD-883 Method 2004	Lid Torque:	-	-	-	-	N/A
DS	G7	MIL-STD-883 Method 2019	Die Shear:	-	-	-	-	N/A
IWV	G8	MIL-STD-883 Method 1018	Internal Water Vapor:	-	-	-	-	N/A

Calculation method of standard failure rate

Target : 0.13um CMOS process product (RL78 series Automobile)

Operating reliability is decided by inherent reliability of device and environment condition of use (See below).

Calculation method of standard failure rate (λ)

$$\lambda = \lambda b \times \pi T \quad \text{(FIT)}$$

(2)Temperature parameter

(1)Basic failure rate

(1)Basic failure rate(λb)

λb : 0.18 (FIT)

(2)Temperature parameter

$$\pi T = \exp\left\{11600 \times Ea \times \left(\frac{1}{273+55} - \frac{1}{273+Ta}\right)\right\}$$

Ea : Activation energy (eV)
Ta : ambient temperature

πT Simplified chart (Ea=0.7eV)

Ta(℃)	40	50	55	60	65	70	75	80	85	90	100	110
πT	0.31	0.68	1	1.45	2.08	2.95	4.15	5.77	7.96	10.88	19.82	34.99

-Confidence level 60% -Standard temperature Ta=55°C

(3)MTTF (Mean Time To Failure)

$$MTTF = \frac{1}{\lambda}$$

Product List

[RL78/F13,F14 series]

R5F10PPJCLFB	R5F10BMGCLFB	R5F10AMGCLFB
R5F10PPJCKFB	R5F10BMGCKFB	R5F10AMGCKFB
R5F10PPHCLFB	R5F10BMFCLFB	R5F10AMFCLFB
R5F10PPHCKFB	R5F10BMFCKFB	R5F10AMFCKFB
R5F10PPGCLFB	R5F10BMECLFB	R5F10AMECLFB
R5F10PPGCKFB	R5F10BMECKFB	R5F10AMECKFB
R5F10PPFCLFB	R5F10BLGCLFB	R5F10ALGCLFB
R5F10PPFCKFB	R5F10BLGCKFB	R5F10ALGCKFB
R5F10PPECLFB	R5F10BLFCLFB	R5F10ALFCLFB
R5F10PPECKFB	R5F10BLFCKFB	R5F10ALFCKFB
R5F10PMJCLFB	R5F10BLECLFB	R5F10ALECLFB
R5F10PMJCKFB	R5F10BLECKFB	R5F10ALECKFB
R5F10PMHCLFB	R5F10BLDCLFB	R5F10ALDCLFB
R5F10PMHCKFB	R5F10BLDCKFB	R5F10ALDCKFB
R5F10PMGCLFB	R5F10BLCCLFB	R5F10ALCCLFB
R5F10PMGCKFB	R5F10BLCCKFB	R5F10ALCCKFB
R5F10PMFCLFB	R5F10BGGCLFB	R5F10AGGCLFB
R5F10PMFCKFB	R5F10BGGCKFB	R5F10AGGCKFB
R5F10PMECLFB	R5F10BGFCLFB	R5F10AGFCLFB
R5F10PMECKFB	R5F10BGFCKFB	R5F10AGFCKFB
R5F10PLJCLFB	R5F10BGECLFB	R5F10AGECLFB
R5F10PLJCKFB	R5F10BGECKFB	R5F10AGECKFB
R5F10PLHCLFB	R5F10BGDCLFB	R5F10AGDCLFB
R5F10PLHCKFB	R5F10BGDCKFB	R5F10AGDCKFB
R5F10PLGCLFB	R5F10BGCCLFB	R5F10AGCCLFB
R5F10PLGCKFB	R5F10BGCCKFB	R5F10AGCCKFB
R5F10PLFCLFB		R5F10AGACLFB
R5F10PLFCKFB		R5F10AGACKFB
R5F10PLECLFB		
R5F10PLECKFB		
R5F10PGJCLFB		
R5F10PGJCKFB		
R5F10PGHCLFB		
R5F10PGHCKFB		
R5F10PGGCLFB		
R5F10PGGCKFB		
R5F10PGFCLFB		
R5F10PGFCKFB		
R5F10PGECLFB		
R5F10PGECKFB		
R5F10PGDCLFB		
R5F10PGDCKFB		