PCN#:[AMBD-2022-1167]

Product Change Notice (PCN)

件名:　RL78/F13,F14 シリーズ Cu ワイヤ製品の前工程生産拠点追加

発行日: 9/29/2022
出荷開始予定日: 12/1/2023
改版履歴: 初版

変更内容の説明:

弊社マイコン製品 RL78/F13,F14 シリーズ Cu ワイヤ製品におきまして、前工程生産拠点の追加を計画しております。生産拠点の追加によりフレキシブルな生産を実施し、安定供給が可能となります。つきましては、お客様にてご購入中の製品において、下記拠点の追加のご案内致しますのでご承知下さいますようお願い申し上げます。生産拠点におきましては、生産能力を考慮し弊社にて判断させていただきます。

1）ウェハプロセス拠点追加　：那珂工場　　Renesas Electronics Corporation (Naka Factory)
2）バックグラインド拠点追加：RSKL　　Renesas Semiconductor KL Sdn. Bhd. (RSKL)

対象製品リスト:

対象製品は下表 1 に示す RL78/F13,F14 シリーズ製品になります。詳細は付録をご参照ください。

表 1. 対象製品

	48pinLQFP (7x7/0.5)	64pinLQFP (10x10/0.5)	80pinLQFP (12x12/0.5)	100pinLQFP (14x14/0.5)
F13 Cu ワイヤ製品	○	○	○	－
F14 Cu ワイヤ製品	○	○	○	○

変更の理由:

製品の安定供給のため。

外形、実装、機能、品質、信頼性への影響:

外形　：　影響ありません
実装　：　影響ありません
機能　：　影響ありません
品質　：　影響ありません
信頼性：　影響ありません

製品の識別方法:

マーク、ラベルまたは T/C コードにて識別可能です。T/C コードの内容は弊社営業へお問い合わせください。

信頼性データについて:

付録をご参照ください。

サンプル出荷予定日:

12/1/2022

製品/材料の化学物質データ:

弊社営業へお申しつけ下さい。

ご注意:

1. PCN をお客様にお渡しした後 30 日以内に受理の御連絡を頂けない場合は、変更内容を御承認頂いたものとみなして変更を実施させて頂きます。

2. お客様が PCN を受理されて承認手続きのための条件が有る場合は、PCN をお客様にお渡しした後 90 日以内に御連絡をお願い致します。90 日以内に何の御連絡もない場合も御承認頂いたものとみなして変更を実施させて頂きます。

3. 変更内容について御承認頂けない場合、最終注文数の御提示と御発注をお願い致します。

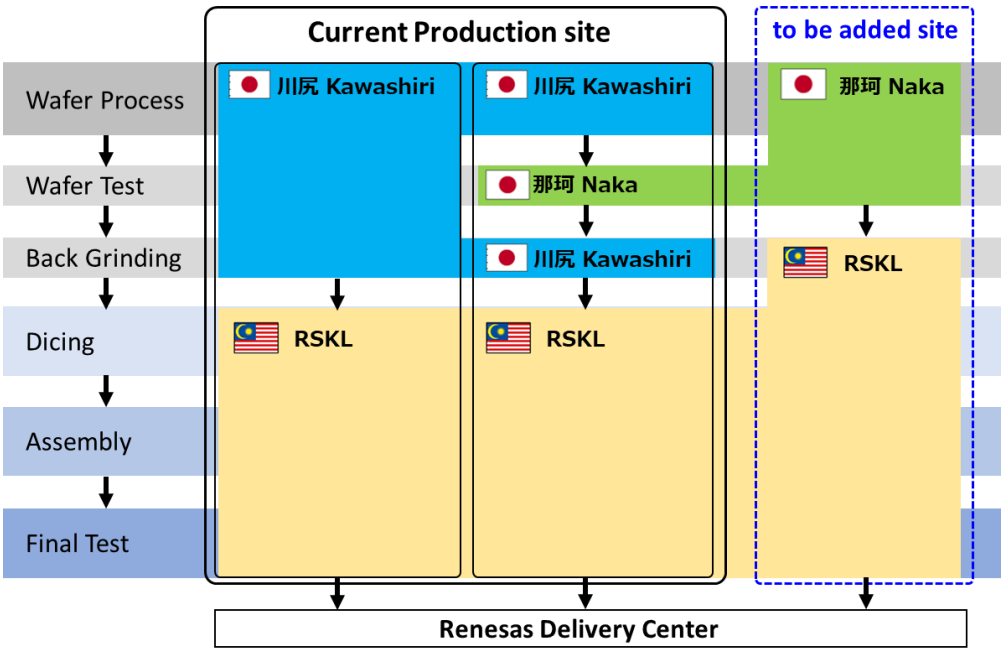
この通知に関するお問い合わせは、弊社営業、特約店までお願い致します。

付録

■製品仕様

項目		現状	展開
製品型名		変更なし	
前工程	拡散拠点	川尻	那珂
	プロセス	変更なし（MF3(130um)プロセス）	
	ウェハテスト拠点	変更なし（川尻／那珂）	
バックグラインド工程	バックグラインド拠点	川尻	RSKL
後工程	組立拠点	変更なし（RSKL）	
	ファイナルテスト拠点	変更なし（RSKL）	
	プロセス	変更なし（Cu ワイヤ）	
	外形	変更なし	
マーク		変更有り （本書　マーク仕様参照）	
ラベル		変更有り （本書　ラベル仕様参照）	

■生産フロー



■マーク仕様

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		

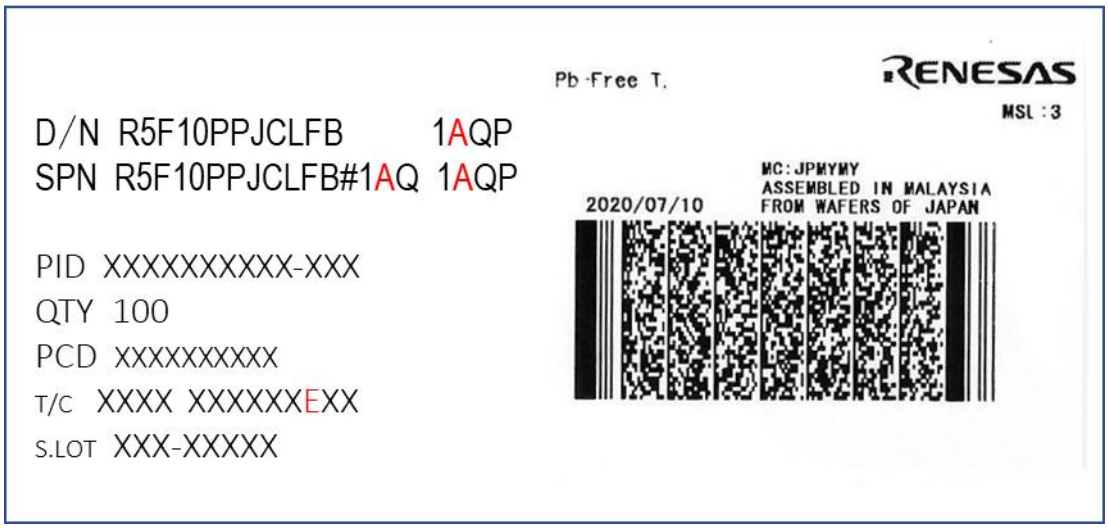
※前工程拠点は赤字の箇所で判別可能です。

■ラベル仕様

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

川尻品/Kawashiri

那珂品/Naka



※前工程拠点は赤字の箇所で判別可能です。

■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-22-0668
Date: 28/Sep./2022

RENESAS SEMICONDUCTOR
RELIABILITY REPORT

SERIES : RL78/F13,F14

DEVICE : [対象製品リスト] をご参照ください

APPLICATION : Automobile

<ウェハ製造工場>
ルネサス セミコンダクタ マニュファクチュアリング株式会社 那珂工場

<組立工場>
Renesas Semiconductor KL Sdn. Bhd.

Quality Assurance Div.
Renesas Electronics Corporation

Notice

1 Descriptions of circuits, software and other related information in this document are provided only to illustrate the operation of semiconductor products and application examples. You are fully responsible for the incorporation or any other use of the circuits, software, and information in the design of your product or system. Renesas Electronics disclaims any and all liability for any losses and damages incurred by you or third parties arising from the use of these circuits, software, or information.

2 Renesas Electronics hereby expressly disclaims any warranties against and liability for infringement or any other claims involving patents, copyrights, or other intellectual property rights of third parties, by or arising from the use of Renesas Electronics products or technical information described in this document, including but not limited to, the product data, drawings, charts, programs, algorithms, and application examples.

3 No license, express, implied or otherwise, is granted hereby under any patents, copyrights or other intellectual property rights of Renesas Electronics or others.

4 You shall be responsible for determining what licenses are required from any third parties, and obtaining such licenses for the lawful import, export, manufacture, sales, utilization, distribution or other disposal of any products incorporating Renesas Electronics products, if required.

5 You shall not alter, modify, copy, or reverse engineer any Renesas Electronics product, whether in whole or in part. Renesas Electronics disclaims any and all liability for any losses or damages incurred by you or third parties arising from such alteration, modification, copying or reverse engineering.

6 Renesas Electronics products are classified according to the following two quality grades: "Standard" and "High Quality". The intended applications for each Renesas Electronics product depends on the product's quality grade, as indicated below.

"Standard": Computers; office equipment; communications equipment; test and measurement equipment; audio and visual equipment; home electronic appliances; machine tools; personal electronic equipment; industrial robots; etc.

"High Quality": Transportation equipment (automobiles, trains, ships, etc.); traffic control (traffic lights); large-scale communication equipment; key financial terminal systems; safety control equipment; etc.

Unless expressly designated as a high reliability product or a product for harsh environments in a Renesas Electronics data sheet or other Renesas Electronics document, Renesas Electronics products are not intended or authorized for use in products or systems that may pose a direct threat to human life or bodily injury (artificial life support devices or systems; surgical implantations; etc.), or may cause serious property damage (space system; undersea repeaters; nuclear power control systems; aircraft control systems; key plant systems; military equipment; etc.). Renesas Electronics disclaims any and all liability for any damages or losses incurred by you or any third parties arising from the use of any Renesas Electronics product that is inconsistent with any Renesas Electronics data sheet, user's manual or other Renesas Electronics document.

7 No semiconductor product is absolutely secure. Notwithstanding any security measures or features that may be implemented in Renesas Electronics hardware or software products, Renesas Electronics shall have absolutely no liability arising out of any vulnerability or security breach, including but not limited to any unauthorized access to or use of a Renesas Electronics product or a system that uses a Renesas Electronics product. RENESAS ELECTRONICS DOES NOT WARRANT OR GUARANTEE THAT RENESAS ELECTRONICS PRODUCTS, OR ANY SYSTEMS CREATED USING RENESAS ELECTRONICS PRODUCTS WILL BE INVULNERABLE OR FREE FROM CORRUPTION, ATTACK, VIRUSES, INTERFERENCE, HACKING, DATA LOSS OR THEFT, OR OTHER SECURITY INTRUSION ("Vulnerability Issues"). RENESAS ELECTRONICS DISCLAIMS ANY AND ALL RESPONSIBILITY OR LIABILITY ARISING FROM OR RELATED TO ANY VULNERABILITY ISSUES. FURTHERMORE, TO THE EXTENT PERMITTED BY APPLICABLE LAW, RENESAS ELECTRONICS DISCLAIMS ANY AND ALL WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THIS DOCUMENT AND ANY RELATED OR ACCOMPANYING SOFTWARE OR HARDWARE, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE.

8 When using Renesas Electronics products, refer to the latest product information (data sheets, user's manuals, application notes, "General Notes for Handling and Using Semiconductor Devices" in the reliability handbook, etc.), and ensure that usage conditions are within the ranges specified by Renesas Electronics with respect to maximum ratings, operating power supply voltage range, heat dissipation characteristics, installation, etc. Renesas Electronics disclaims any and all liability for any malfunctions, failure or accident arising out of the use of Renesas Electronics products outside of such specified ranges.

9 Although Renesas Electronics endeavors to improve the quality and reliability of Renesas Electronics products, semiconductor products have specific characteristics, such as the occurrence of failure at a certain rate and malfunctions under certain use conditions. Unless designated as a high reliability product or a product for harsh environments in a Renesas Electronics data sheet or other Renesas Electronics document, Renesas Electronics products are not subject to radiation resistance design. You are responsible for implementing safety measures to guard against the possibility of bodily injury, injury or damage caused by fire, and/or danger to the public in the event of a failure or malfunction of Renesas Electronics products, such as safety design for hardware and software, including but not limited to redundancy, fire control and malfunction prevention, appropriate treatment for aging degradation or any other appropriate measures. Because the evaluation of microcomputer software alone is very difficult and impractical, you are responsible for evaluating the safety of the final products or systems manufactured by you.

10 Please contact a Renesas Electronics sales office for details as to environmental matters such as the environmental compatibility of each Renesas Electronics product. You are responsible for carefully and sufficiently investigating applicable laws and regulations that regulate the inclusion or use of controlled substances, including without limitation, the EU RoHS Directive, and using Renesas Electronics products in compliance with all these applicable laws and regulations. Renesas Electronics disclaims any and all liability for damages or losses occurring as a result of your noncompliance with applicable laws and regulations.

11 Renesas Electronics products and technologies shall not be used for or incorporated into any products or systems whose manufacture, use, or sale is prohibited under any applicable domestic or foreign laws or regulations. You shall comply with any applicable export control laws and regulations promulgated and administered by the governments of any countries asserting jurisdiction over the parties or transactions.

12 It is the responsibility of the buyer or distributor of Renesas Electronics products, or any other party who distributes, disposes of, or otherwise sells or transfers the product to a third party, to notify such third party in advance of the contents and conditions set forth in this document .

13 This document shall not be reproduced or duplicated in any form or disclosed to any third party, in whole or in part, without prior written consent of Renesas Electronics.

14 Please contact a Renesas Electronics sales office if you have any questions regarding the information contained in this document or Renesas Electronics products.

(Note 1) "Renesas Electronics" as used in this document means Renesas Electronics Corporation and also includes its directly or indirectly controlled subsidiaries.

(Note 2) "Renesas Electronics product(s)" means any product developed or manufactured by or for Renesas Electronics.

(Rev.5.0-2 October 2020)

Q100 Qualification Test Results

[信頼性試験は(拡散プロセス/拡散工場),(パッケージ構造/組立工場)を考慮した代表製品で実施しております。]

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)

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

対象製品リスト

[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		