

Products that are described in below table are Non-promotion products and Discontinued Products of Power Management IC. The definition of these products are shown below.

■ **Non-promotion products:** These products will be discontinued in the future. New adoption is not recommended.

■ **Discontinued products:** These products are already discontinued.

*) The alternative products are not fully compatible with these Products.

The function of alternative products are similar to these products, but the electrical characteristics and the pin-layout may differ from these products.

Category	Product Name	Sub Category	Package	Status	Discontinue Month*	Alternative Product				
						Same specification but different package	Package	Succeeding Product	Package	
Voltage Regulator	RE5RA	Low supply current type	TO-92	Discontinued	Already	—	—	RP173K RP173N RP173Q	DFN(PLP)1010-4 SC-88A SOT-23-5	
	RE5RE	Low supply current type	TO-92	Discontinued	Already	RH5RE	SOT-89	RP173K RP173N RP173Q	DFN(PLP)1010-4 SC-88A SOT-23-5	
	RE5RL	Low supply current type	TO-92	Discontinued	Already	RH5RL RN5RL	SOT-89 SOT-23-5	RP173K RP173N RP173Q	DFN(PLP)1010-4 SC-88A SOT-23-5	
	RH5RA	Low supply current type	SOT-89	Discontinued	Already	—	—	RP173K RP173N RP173Q	DFN(PLP)1010-4 SC-88A SOT-23-5	
	RN5RG	External transistor type	SOT-23-5	Non-promotion	Jan., 2014	—	—	RN5RF	SOT-23-5	
	R1110N	Low supply current type	SOT-23-5	Discontinued	Already	—	—	R1111N	SOT-23-5	
	R1112N	High-performance type	SOT-23-5	Non-promotion	Jan., 2014	—	—	RP112N	SOT-23-5	
	R1113Z	High-performance type	WLCSP-4-P1	Non-promotion	Jan., 2014	R1122N	SOT-23-5	RP112N	SOT-23-5	
	R1115Z	Standard type	WLCSP-4-P4	Non-promotion	Jan., 2014	R1114D R1114N R1114Q	SON1612-6 SOT-23-5 SC-82AB	RP130K RP130N RP130Q	DFN(PLP)1010-4 SOT-23-5 SC-82AB	
	R1118N	With ECO function	SOT-23-5	Non-promotion	Jan., 2014	R1118K	DFN(PLP)1612-4B	RP201K RP201Z	DFN(PLP)1212-6 WLCSP-4-P5	
	R1120N	Standard type	SOT-23-5	Discontinued	Already	—	—	R1121N	SOT-23-5	
	R1124N	Standard type	SOT-23-5	Non-promotion	Jan., 2014	R1114N	SOT-23-5	RP130N	SOT-23-5	
	R1126N	With ECO function	SOT-23-5	Discontinued	Already	R1116N	SOT-23-5	RP201K RP201Z	DFN(PLP)1212-6 WLCSP-4-P5	
	R1130D	Standard type	HSO-6	Discontinued	Already	R1130H	SOT-89-5	RP170H RP170N	SOT-89-5 SOT-23-5	
	R1131Dxx2	Standard type	HSO-6	Non-promotion	Jan., 2014	R1131N	SOT-23-5	RP101Kxx1 RP101Kxx2 RP101N	DFN(PLP)1612-4 DFN(PLP)1612-4B SOT-23-5	
	R1140Q	Standard type	SC-82AB	Discontinued	Already	—	—	R1141Q RP109K RP109L RP109Q RP109N	SC-82AB DFN(PLP)0808-4 DFN1010-4 SC-88A SOT-23-5	
	R1151N	External transistor type with VD	SOT-23-6	Non-promotion	Jan., 2014	—	—	—	—	
	R1152N	External transistor type	SOT-23-5	Non-promotion	Jan., 2014	—	—	—	—	
	R1160D	With ECO function	SON-6	Non-promotion	Jan., 2014	R1160N	SOT-23-5	RP202K RP202Q RP202N	DFN(PLP)1010-4 SC-88A SOT-23-5	
	R1161Dxx1 R1161Dxx2	With ECO function	SON-6 HSO-6	Non-promotion	Jan., 2014	R1161N	SOT-23-5	RP200K RP200N RP200Z	DFN(PLP)1212-6 SOT-23-5 WLCSP-4-P5	
	R1162D R1162N	With ECO function	SON1612-6 SOT-23-5	Non-promotion	Jan., 2014	—	—	R1163D R1163K R1163N RP201K RP201Z	SON-6 DFN(PLP)1616-6 SOT-23-5 DFN(PLP)1212-6 WLCSP-4-P5	
	R1182K R1182N	With ECO function	DFN(PLP)1616-6 SOT-23-5	Non-promotion	Jan., 2014	—	—	R1116D R1116N	SON1612-6 SOT-23-5	
	R1500J	Standard type	TO-252-5-P2	Non-promotion	Jan., 2014	R1500H	SOT-89-5	R1501J	TO-252-5-P2	
	RP103Qxx2	Standard type	SC-88A	Non-promotion	Jan., 2014	RP103K RP103N RP103Qxx1	DFN(PLP)1010-4 SOT-23-5 SC-82AB	RP109K RP109L RP109Q RP109N	DFN(PLP)0808-4 DFN1010-4 SC-88A SOT-23-5	
	RP104Q	Low supply current type	SC-82AB	Non-promotion	Jan., 2014	RP104K RP104N	DFN(PLP)1010-4 SOT-23-5	RP110K RP110L RP110Q RP110N	DFN(PLP)0808-4 DFN1010-4 SC-88A SOT-23-5	
	RP105Q	Ultra low voltage	SC-88A	Non-promotion	Jan., 2014	RP105K RP105N	DFN(PLP)1212-6 SOT-23-5	—	—	
	RP113Q	Standard type	SC-88A	Non-promotion	Jan., 2014	RP103K RP103N RP103Qxx1	DFN(PLP)1010-4 SOT-23-5 SC-82AB	RP109K RP109L RP109Q RP109N	DFN(PLP)0808-4 DFN1010-4 SC-88A SOT-23-5	
	RP170Q	Standard type	SC-88A	Non-promotion	Jan., 2014	RP170H RP170N	SOT-89-5 SOT-23-5	—	—	
	RP200Q	With ECO function	SC-88A	Non-promotion	Jan., 2014	RP200K RP200N RP200Z	DFN(PLP)1212-6 SOT-23-5 WLCSP-4-P5	—	—	
	RP201N RP201Q	With ECO function	SOT-23-5 SC-88A	Non-promotion	Jan., 2014	RP201K RP201Z	DFN(PLP)1212-6 WLCSP-4-P5	—	—	
	Voltage Regulator (Multiple Output)	R5320D R5320G	Triple output	SON-8 SSOP-8G	Discontinued	Already	—	—	R5324K	DFN(PLP)2527-10
		R5321D	Dual output	SON-8	Non-promotion	Jan., 2014	—	—	RP152L RP152N RP153L	DFN1212-6 SOT-23-6 DFN1216-8
		R5322N	Dual output	SOT-23-6W	Discontinued	Already	—	—	RP152L RP152N RP153L	DFN1212-6 SOT-23-6 DFN1216-8
R5323K R5323N R5323Z		Dual output	DFN(PLP)1820-6 SOT-23-6 WLCSP-6-P1	Non-promotion	Jan., 2014	—	—	RP152L RP152N RP153L	DFN1212-6 SOT-23-6 DFN1216-8	
R5324D		Triple output	SON-8	Non-promotion	Jan., 2014	R5324K	DFN(PLP)2527-10	—	—	
R5325K R5325N		Dual output, With ECO function	DFN(PLP)1820-6 SOT-23-6	Non-promotion	Jan., 2014	—	—	—	—	
R5326N R5326Z		Dual output, With ECO function	SOT-23-6 WLCSP-6-P1	Non-promotion	Jan., 2014	R5326K	DFN(PLP)1820-6	—	—	
RP151K		Dual output with VD	DFN(PLP)2020-8	Non-promotion	Jan., 2014	—	—	—	—	

*) Non-Halogen Free Power Management IC products will be discontinued at the end of September, 2013.

Category	Product Name	Sub Category	Package	Status	Discontinue Month	Alternative Product				
						Same specification but different package	Package	Succeeding Product	Package	
Voltage Detector	RE5VA	Normal type	TO-92	Discontinued	Already	—	—	—	—	
	RE5VL	Normal type	TO-92	Discontinued	Already	—	—	—	—	
	RE5VS	Normal type	TO-92	Discontinued	Already	—	—	—	—	
	RE5VT	Normal type	TO-92	Discontinued	Already	—	—	—	—	
	RH5VA	Normal type	SOT-89	Discontinued	Already	—	—	R3111H	SOT-89	
	RH5VL	Normal type	SOT-89	Discontinued	Already	—	—	R3111H	SOT-89	
	RH5VT	Normal type	SOT-89	Discontinued	Already	—	—	R3111H	SOT-89	
	RN5VL	Normal type	SOT-23-5	Discontinued	Already	—	—	R3111Nxx1	SOT-23-5	
	RN5VS	Normal type	SOT-23-5	Discontinued	Already	—	—	R3111Nxx1	SOT-23-5	
	RN5VT	Normal type	SOT-23-5	Discontinued	Already	—	—	R3111Nxx1	SOT-23-5	
	R3111E	Normal type	TO-92	Discontinued	Already	R3111H R3111Nxx1 R3111Nxx2 R3111Qxx1 R3111Qxx2	SOT-89 SOT-23-5 SOT-23-3 SC-82AB SC-88A	—	—	
	R3113D	Normal type	SON1408-3	Non-promotion	Jan., 2014	—	—	R3114K R3114N R3114Q	DFN(PLP)1010-4 SOT-23-5 SC-82AB	
	R3115Z	With delay function (External capacitor type)	WLCSP-4-P2	Discontinued	Already	R3112D R3112N R3112Q	SON1612-6 SOT-23-5 SC-82AB	R3116K R3116N R3116Q	DFN(PLP)1010-4 SOT-23-5 SC-82AB	
	R3131N	With delay function (Internal counter type)	SOT-23-3	Non-promotion	Jan., 2014	—	—	R3133D RP300K RP300N	SON1612-6 DFN(PLP)1010-4 SOT-23-5	
	R3133Q	With delay function (Internal counter type)	SC-82AB	Non-promotion	Jan., 2014	R3133D	SON1612-6	RP300K RP300N	DFN(PLP)1010-4 SOT-23-5	
	R3134K R3134Q	With delay function (Internal counter type)	DFN(PLP)1212-6 SC-88A	Non-promotion	Jan., 2014	R3134N	SOT-23-5	RP300K RP300N	DFN(PLP)1010-4 SOT-23-5	
Watchdog Timer	R5102V	WDT with Dual output VR	SSOP-10	Discontinued	Already	—	—	—	—	
Switch IC	R5521V	For pay on-demand	SSOP-16	Discontinued	Already	—	—	—	—	
	R5522V	For pay on-demand	SSOP-20	Discontinued	Already	—	—	—	—	
	R5531V	For PCMCIA 1slot	SSOP-16	Non-promotion	Jan., 2014	—	—	R5533V	SSOP-16	
	R5532V	For PCMCIA 2slot	SSOP-28	Discontinued	Already	—	—	R5533V	SSOP-16	
	R5534V	For PCMCIA 2slot	SSOP-20	Discontinued	Already	—	—	R5533V	SSOP-16	
R5535V	For Express Card	SSOP-20	Discontinued	Already	—	—	R5538D	QFN0404-20		
DC/DC Converter	RF5RD	Step-up with VR	SOP-8	Discontinued	Already	—	—	RP600K	DFN(PLP)2527-10	
	RH5RC	Step-up	SOT-89	Discontinued	Already	—	—	RP401K RP401N	DFN(PLP)1820-6 SOT-23-5	
	RH5RHxx1 RH5RHxx2 RH5RHxx3	Step-up	SOT-89 SOT-89 SOT-89-5	Discontinued	Already	—	—	RP401K RP401N	DFN(PLP)1820-6 SOT-23-5	
	RH5Rlxx1 RH5Rlxx2 RH5Rlxx3	Step-up	SOT-89 SOT-89 SOT-89-5	Discontinued	Already	—	—	RP401K RP401N	DFN(PLP)1820-6 SOT-23-5	
	RN5RYxx1	Step-up	SOT-23-5	Non-promotion	Jan., 2014	—	—	RP401K RP401N	DFN(PLP)1820-6 SOT-23-5	
	RN5RY202	Step-up	SOT-23-5	Non-promotion	Jan., 2014	—	—	RP401K RP401N	DFN(PLP)1820-6 SOT-23-5	
	RS5RJ	Step-up with VR and VD	SOP-8	Discontinued	Already	—	—	RP600K	DFN(PLP)2527-10	
	RS5RM	Step-up with VR and VD	SOP-8	Discontinued	Already	—	—	RP600K	DFN(PLP)2527-10	
	RV5VH	Step-up/Inverting with VD	SSOP-8G	Discontinued	Already	—	—	R1283K R1286K	DFN(PLP)2730-12 DFN(PLP)2730-12	
	R1200Z	For PMOLED and general step-up use	WLCSP-6-P1	Non-promotion	Jan., 2014	R1200K R1200L R1200N	DFN(PLP)1820-6 DFN1616-6 SOT-23-6	R1202LxxxA/B R1202NxxxA/B	DFN1616-6B TSOT-23-6	
	R1201L	For white LED backlight	DFN1616-6	Non-promotion	Jan., 2014	R1201N	SOT-23-6	R1202LxxxD R1202NxxxD	DFN1616-6B TSOT-23-6	
	R1221N	Step-down with VD (Middle voltage)	SOT-23-6W	Discontinued	Already	—	—	R1224N R1225N	SOT-23-5 SOT-23-6W	
	R1230D	Step-down (Low voltage)	SON-8	Discontinued	Already	—	—	RP504K RP504L RP504N	DFN(PLP)1212-6F DFN1616-6B SOT-23-5	
	R1234D	Step-down (Low voltage)	SON-8	Discontinued	Already	—	—	RP504K RP504L RP504N	DFN(PLP)1212-6F DFN1616-6B SOT-23-5	
	R1250V	Charge pump inverting	TSOP-8	Discontinued	Already	—	—	—	—	
	R1280D	Step-up/Inverting	SON-10	Non-promotion	Jan., 2014	—	—	R1283K R1286K	DFN(PLP)2730-12 DFN(PLP)2730-12	
	R1282D	Step-up/Step-down	SON-10	Non-promotion	Jan., 2014	—	—	—	—	
	R1283Z	Step-up/Inverting	WLCSP-11-P2	Non-promotion	Jan., 2014	R1283K	DFN(PLP)2730-12	R1286K	DFN(PLP)2730-12	
	R1285L	Step-up/Inverting	DFN2730-12	Non-promotion	Jan., 2014	—	—	R1283K R1286K	DFN(PLP)2730-12 DFN(PLP)2730-12	
	RP503Z	Step-down (Low voltage)	WLCSP-6-P2	Non-promotion	Jan., 2014	RP503L RP503N	DFN1616-6 SOT-23-5	RP504K RP504L RP504N	DFN(PLP)1212-6F DFN1616-6B SOT-23-5	
	Li-ion/polymer Battery Protection ICs	R5400D	For 1cell battery	SON1612-6	Discontinued	Already	R5400N	SOT-23-5	—	—
		R5401N	For 1cell battery	SOT-23-5	Non-promotion	Jan., 2014	R5401K	DFN(PLP)1820-6	R5455K	DFN(PLP)2114-4
R5404K		For 1cell battery	DFN(PLP)1616-6	Non-promotion	Jan., 2014	—	—	R5455K	DFN(PLP)2114-4	
R5407K		For 1cell battery	DFN(PLP)1820-6B	Non-promotion	Jan., 2014	—	—	R5403K	DFN(PLP)1820-6	
R5408K		For 1cell battery	DFN(PLP)1616-6	Non-promotion	Jan., 2014	R5408L R5408N	DFN1414-6 SOT-23-6	R5405K	DFN(PLP)1616-6	
R5409K		For 1cell battery	DFN(PLP)2114-4	Non-promotion	Jan., 2014	—	—	R5455K	DFN(PLP)2114-4	
R5421N		For 1cell battery	SOT-23-6	Non-promotion	Jan., 2014	—	—	R5405N	SOT23-6	
R5425N		For 1cell battery	SOT-23-6	Non-promotion	Jan., 2014	—	—	R5405N	SOT23-6	
R5429D R5429N		For 1cell battery	SON-6 SOT-23-6	Non-promotion	Jan., 2014	—	—	R5401K	DFN(PLP)1820-6	
R5451K		For 1cell battery	DFN(PLP)1616-6B	Non-promotion	Jan., 2014	—	—	R5450N	SOT23-5	
Multi Power Supply		RS5VE	For mobile phone	SSOP-16	Discontinued	Already	—	—	—	—
		RV5VE	For mobile phone	VSSOP-16	Discontinued	Already	—	—	—	—
		R5210D R5210N	For optical disk drive	HSON-6 SOT-23-6W	Discontinued	Already	—	—	RP901K	DFN(PLP)2527-10
	R5212D	For optical disk drive	HSON-6	Discontinued	Already	—	—	RP901K	DFN(PLP)2527-10	
	R5310L	For mobile phone	LQFP0505-32	Discontinued	Already	—	—	—	—	
	R5312L	For mobile phone	LQFP0505-32	Discontinued	Already	—	—	—	—	
	R5314D	For mobile phone	QFN0404-20	Non-promotion	Jan., 2014	—	—	—	—	
	R5510H	For optical disk drive	SOT-89-5	Non-promotion	Jan., 2014	—	—	RP901K	DFN(PLP)2527-10	
	R5511D	For optical disk drive	SON-6	Discontinued	Already	—	—	RP901K	DFN(PLP)2527-10	
	R5511H R5511N	For optical disk drive	SOT-89-5 SOT-23-5	Non-promotion	Jan., 2014	—	—	RP901K	DFN(PLP)2527-10	
	RP902K	For optical disk drive	QFN0404-20	Discontinued	Already	—	—	—	—	

*) Non-Halogen Free Power Management IC products will be discontinued at the end of September, 2013.