

RENESAS TECHNICAL UPDATE

TOYOSU FORESIA, 3-2-24, Toyosu, Koto-ku, Tokyo 135-0061, Japan
Renesas Electronics Corporation

Product Category	MPU/MCU		Document No.	TN-RX*-A0233A/E	Rev.	1.00
Title	Addition of G Version (Topr = -40 to 105°C) Products to RX72M Group, RX72N Group, RX66N Group, RX65N Group, and RX651 Group		Information Category	Technical Notification		
Applicable Product	RX72M Group, RX72N Group, RX66N Group, RX65N Group, RX651 Group	Lot No. All	Reference Document	RX72M Group User's Manual: Hardware Rev.1.00 (R01UH0804EJ0100) RX72N Group User's Manual: Hardware Rev.1.00 (R01UH0824EJ0100) RX66N Group User's Manual: Hardware Rev.1.00 (R01UH0825EJ0100) RX65N Group, RX651 Group User's Manual: Hardware Rev.2.30 (R01UH0590EJ0230)		

Additions were made to the lists in tables 1 to 5 of G-version products (Topr = -40°C to +105°C) of the RX72M Group, RX72N Group, RX66N Group, RX65N Group, and RX651 Group in TFLGA and LFBGA packages.

To use these products, please contact our sales office.

Table 1. List of RX72M Group G-version Products

Part No.	Part No. (for Orders)	Package	Code Flash Memory Capacity	RAM Capacity	Data Flash Memory Capacity	Operating Frequency (Max.)	Encryption Module
R5F572MNDGBD	R5F572MNDGBD#20	PLBG0224GA-A	4 Mbytes	1 Mbyte	32 Kbytes	240 MHz	Not available
R5F572MNHGBD	R5F572MNHGBD#20	PLBG0224GA-A	4 Mbytes	1 Mbyte	32 Kbytes	240 MHz	Available
R5F572MDDGBD	R5F572MDDGBD#20	PLBG0224GA-A	2 Mbytes	1 Mbyte	32 Kbytes	240 MHz	Not available
R5F572MDHGBD	R5F572MDHGBD#20	PLBG0224GA-A	2 Mbytes	1 Mbyte	32 Kbytes	240 MHz	Available
R5F572MNDGBG	R5F572MNDGBG#20	PLBG0176GA-A	4 Mbytes	1 Mbyte	32 Kbytes	240 MHz	Not available
R5F572MNHGBG	R5F572MNHGBG#20	PLBG0176GA-A	4 Mbytes	1 Mbyte	32 Kbytes	240 MHz	Available
R5F572MDDGBG	R5F572MDDGBG#20	PLBG0176GA-A	2 Mbytes	1 Mbyte	32 Kbytes	240 MHz	Not available
R5F572MDHGBG	R5F572MDHGBG#20	PLBG0176GA-A	2 Mbytes	1 Mbyte	32 Kbytes	240 MHz	Available

Table 2. List of RX72N Group G-version Products

Part No.	Part No. (for Orders)	Package	Code Flash Memory Capacity	RAM Capacity	Data Flash Memory Capacity	Operating Frequency (Max.)	Encryption Module
R5F572NNDGBD	R5F572NNDGBD#20	PLBG0224GA-A	4 Mbytes	1 Mbyte	32 Kbytes	240 MHz	Not available
R5F572NNHGBD	R5F572NNHGBD#20	PLBG0224GA-A	4 Mbytes	1 Mbyte	32 Kbytes	240 MHz	Available
R5F572NDDGBD	R5F572NDDGBD#20	PLBG0224GA-A	2 Mbytes	1 Mbyte	32 Kbytes	240 MHz	Not available
R5F572NDHGBD	R5F572NDHGBD#20	PLBG0224GA-A	2 Mbytes	1 Mbyte	32 Kbytes	240 MHz	Available
R5F572NNDGBG	R5F572NNDGBG#20	PLBG0176GA-A	4 Mbytes	1 Mbyte	32 Kbytes	240 MHz	Not available
R5F572NNHGBG	R5F572NNHGBG#20	PLBG0176GA-A	4 Mbytes	1 Mbyte	32 Kbytes	240 MHz	Available
R5F572NDDGBG	R5F572NDDGBG#20	PLBG0176GA-A	2 Mbytes	1 Mbyte	32 Kbytes	240 MHz	Not available
R5F572NDHGBG	R5F572NDHGBG#20	PLBG0176GA-A	2 Mbytes	1 Mbyte	32 Kbytes	240 MHz	Available
R5F572NNDGLK	R5F572NNDGLK#20	PTLG0145KA-A	4 Mbytes	1 Mbyte	32 Kbytes	240 MHz	Not available
R5F572NNHGLK	R5F572NNHGLK#20	PTLG0145KA-A	4 Mbytes	1 Mbyte	32 Kbytes	240 MHz	Available
R5F572NDDGLK	R5F572NDDGLK#20	PTLG0145KA-A	2 Mbytes	1 Mbyte	32 Kbytes	240 MHz	Not available
R5F572NDHGLK	R5F572NDHGLK#20	PTLG0145KA-A	2 Mbytes	1 Mbyte	32 Kbytes	240 MHz	Available

Table 3. List of RX66N Group G-version Products

Part No.	Part No. (for Orders)	Package	Code Flash Memory Capacity	RAM Capacity	Data Flash Memory Capacity	Operating Frequency (Max.)	Encryption Module
R5F566NNDGDB	R5F566NNDGDB#20	PLBG0224GA-A	4 Mbytes	1 Mbyte	32 Kbytes	120 MHz	Not available
R5F566NNHGDB	R5F566NNHGDB#20	PLBG0224GA-A	4 Mbytes	1 Mbyte	32 Kbytes	120 MHz	Available
R5F566NDDGDB	R5F566NDDGDB#20	PLBG0224GA-A	2 Mbytes	1 Mbyte	32 Kbytes	120 MHz	Not available
R5F566NDHGDB	R5F566NDHGDB#20	PLBG0224GA-A	2 Mbytes	1 Mbyte	32 Kbytes	120 MHz	Available
R5F566NNDGBG	R5F566NNDGBG#20	PLBG0176GA-A	4 Mbytes	1 Mbyte	32 Kbytes	120 MHz	Not available
R5F566NNHGBG	R5F566NNHGBG#20	PLBG0176GA-A	4 Mbytes	1 Mbyte	32 Kbytes	120 MHz	Available
R5F566NDDGBG	R5F566NDDGBG#20	PLBG0176GA-A	2 Mbytes	1 Mbyte	32 Kbytes	120 MHz	Not available
R5F566NDHGBG	R5F566NDHGBG#20	PLBG0176GA-A	2 Mbytes	1 Mbyte	32 Kbytes	120 MHz	Available
R5F566NNDGLK	R5F566NNDGLK#20	PTLG0145KA-A	4 Mbytes	1 Mbyte	32 Kbytes	120 MHz	Not available
R5F566NNHGLK	R5F566NNHGLK#20	PTLG0145KA-A	4 Mbytes	1 Mbyte	32 Kbytes	120 MHz	Available
R5F566NDDGLK	R5F566NDDGLK#20	PTLG0145KA-A	2 Mbytes	1 Mbyte	32 Kbytes	120 MHz	Not available
R5F566NDHGLK	R5F566NDHGLK#20	PTLG0145KA-A	2 Mbytes	1 Mbyte	32 Kbytes	120 MHz	Available

Table 4. List of RX65N Group G-version Products (1/2)

Part No.	Part No. (for Orders)	Package	Code Flash Memory Capacity	RAM Capacity	Data Flash Memory Capacity	Operating Frequency (Max.)	Encryption Module	SDHI/SDSI	Dual Bank
R5F565NEDGBG	R5F565NEDGBG#20	PLBG0176GA-A	2 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Not available	Available	Available
R5F565NEHGBG	R5F565NEHGBG#20	PLBG0176GA-A	2 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Available	Available	Available
R5F565NCDGBG	R5F565NCDGBG#20	PLBG0176GA-A	1.5 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Not available	Available	Available
R5F565NCHGBG	R5F565NCHGBG#20	PLBG0176GA-A	1.5 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Available	Available	Available
R5F565NEDGLC	R5F565NEDGLC#20	PTLG0177KA-A	2 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Not available	Available	Available
R5F565NEHGLC	R5F565NEHGLC#20	PTLG0177KA-A	2 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Available	Available	Available
R5F565NCDGLC	R5F565NCDGLC#20	PTLG0177KA-A	1.5 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Not available	Available	Available
R5F565NCHGLC	R5F565NCHGLC#20	PTLG0177KA-A	1.5 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Available	Available	Available
R5F565NEDGLK	R5F565NEDGLK#20	PTLG0145KA-A	2 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Not available	Available	Available
R5F565NEHGLK	R5F565NEHGLK#20	PTLG0145KA-A	2 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Available	Available	Available
R5F565NCDGLK	R5F565NCDGLK#20	PTLG0145KA-A	1.5 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Not available	Available	Available
R5F565NCHGLK	R5F565NCHGLK#20	PTLG0145KA-A	1.5 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Available	Available	Available
R5F565N9AGLK	R5F565N9AGLK#20	PTLG0145KA-A	1 Mbyte	256 Kbytes	Not included	120 MHz	Not available	Not available	Not available
R5F565N9BGLK	R5F565N9BGLK#20	PTLG0145KA-A	1 Mbyte	256 Kbytes	Not included	120 MHz	Not available	Available	Not available
R5F565N9EGLK	R5F565N9EGLK#20	PTLG0145KA-A	1 Mbyte	256 Kbytes	Not included	120 MHz	Available	Not available	Not available
R5F565N9FGLK	R5F565N9FGLK#20	PTLG0145KA-A	1 Mbyte	256 Kbytes	Not included	120 MHz	Available	Available	Not available
R5F565N7AGLK	R5F565N7AGLK#20	PTLG0145KA-A	768 Kbytes	256 Kbytes	Not included	120 MHz	Not available	Not available	Not available
R5F565N7BGLK	R5F565N7BGLK#20	PTLG0145KA-A	768 Kbytes	256 Kbytes	Not included	120 MHz	Not available	Available	Not available
R5F565N7EGLK	R5F565N7EGLK#20	PTLG0145KA-A	768 Kbytes	256 Kbytes	Not included	120 MHz	Available	Not available	Not available
R5F565N7FGLK	R5F565N7FGLK#20	PTLG0145KA-A	768 Kbytes	256 Kbytes	Not included	120 MHz	Available	Available	Not available
R5F565N4AGLK	R5F565N4AGLK#20	PTLG0145KA-A	512 Kbytes	256 Kbytes	Not included	120 MHz	Not available	Not available	Not available
R5F565N4BGLK	R5F565N4BGLK#20	PTLG0145KA-A	512 Kbytes	256 Kbytes	Not included	120 MHz	Not available	Available	Not available
R5F565N4EGLK	R5F565N4EGLK#20	PTLG0145KA-A	512 Kbytes	256 Kbytes	Not included	120 MHz	Available	Not available	Not available
R5F565N4FGLK	R5F565N4FGLK#20	PTLG0145KA-A	512 Kbytes	256 Kbytes	Not included	120 MHz	Available	Available	Not available

Table 4. List of RX65N Group G-version Products (2/2)

Part No.	Part No. (for Orders)	Package	Code Flash Memory Capacity	RAM Capacity	Data Flash Memory Capacity	Operating Frequency (Max.)	Encryption Module	SDHI/SDSI	Dual Bank
R5F565NEDGLJ	R5F565NEDGLJ#20	PTLG0100JA-A	2 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Not available	Available	Available
R5F565NEHGLJ	R5F565NEHGLJ#20	PTLG0100JA-A	2 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Available	Available	Available
R5F565NCDGLJ	R5F565NCDGLJ#20	PTLG0100JA-A	1.5 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Not available	Available	Available
R5F565NCHGLJ	R5F565NCHGLJ#20	PTLG0100JA-A	1.5 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Available	Available	Available
R5F565N9AGLJ	R5F565N9AGLJ#20	PTLG0100JA-A	1 Mbyte	256 Kbytes	Not included	120 MHz	Not available	Not available	Not available
R5F565N9BGLJ	R5F565N9BGLJ#20	PTLG0100JA-A	1 Mbyte	256 Kbytes	Not included	120 MHz	Not available	Available	Not available
R5F565N9EGLJ	R5F565N9EGLJ#20	PTLG0100JA-A	1 Mbyte	256 Kbytes	Not included	120 MHz	Available	Not available	Not available
R5F565N9FGLJ	R5F565N9FGLJ#20	PTLG0100JA-A	1 Mbyte	256 Kbytes	Not included	120 MHz	Available	Available	Not available
R5F565N7AGLJ	R5F565N7AGLJ#20	PTLG0100JA-A	768 Kbytes	256 Kbytes	Not included	120 MHz	Not available	Not available	Not available
R5F565N7BGLJ	R5F565N7BGLJ#20	PTLG0100JA-A	768 Kbytes	256 Kbytes	Not included	120 MHz	Not available	Available	Not available
R5F565N7EGLJ	R5F565N7EGLJ#20	PTLG0100JA-A	768 Kbytes	256 Kbytes	Not included	120 MHz	Available	Not available	Not available
R5F565N7FGLJ	R5F565N7FGLJ#20	PTLG0100JA-A	768 Kbytes	256 Kbytes	Not included	120 MHz	Available	Available	Not available
R5F565N4AGLJ	R5F565N4AGLJ#20	PTLG0100JA-A	512 Kbytes	256 Kbytes	Not included	120 MHz	Not available	Not available	Not available
R5F565N4BGLJ	R5F565N4BGLJ#20	PTLG0100JA-A	512 Kbytes	256 Kbytes	Not included	120 MHz	Not available	Available	Not available
R5F565N4EGLJ	R5F565N4EGLJ#20	PTLG0100JA-A	512 Kbytes	256 Kbytes	Not included	120 MHz	Available	Not available	Not available
R5F565N4FGLJ	R5F565N4FGLJ#20	PTLG0100JA-A	512 Kbytes	256 Kbytes	Not included	120 MHz	Available	Available	Not available

Table 5. List of RX651 Group G-version Products (1/2)

Part No.	Part No. (for Orders)	Package	Code Flash Memory Capacity	RAM Capacity	Data Flash Memory Capacity	Operating Frequency (Max.)	Encryption Module	SDHI/SDSI	Dual Bank
R5F5651EDGBG	R5F5651EDGBG#20	PLBG0176GA-A	2 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Not available	Available	Available
R5F5651EHGBG	R5F5651EHGBG#20	PLBG0176GA-A	2 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Available	Available	Available
R5F5651CDGBG	R5F5651CDGBG#20	PLBG0176GA-A	1.5 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Not available	Available	Available
R5F5651CHGBG	R5F5651CHGBG#20	PLBG0176GA-A	1.5 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Available	Available	Available
R5F5651EDGBP	R5F5651EDGBP#20	PTBG0064KB-A	2 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Not available	Available*1	Available
R5F5651EHGBP	R5F5651EHGBP#20	PTBG0064KB-A	2 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Available	Available*1	Available
R5F5651CDGBP	R5F5651CDGBP#20	PTBG0064KB-A	1.5 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Not available	Available*1	Available
R5F5651CHGBP	R5F5651CHGBP#20	PTBG0064KB-A	1.5 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Available	Available*1	Available
R5F56519BGBP	R5F56519BGBP#20	PTBG0064KB-A	1 Mbyte	256 Kbytes	Not included	120 MHz	Not available	Available*1	Not available
R5F56519FGBP	R5F56519FGBP#20	PTBG0064KB-A	1 Mbyte	256 Kbytes	Not included	120 MHz	Available	Available*1	Not available
R5F56517BGBP	R5F56517BGBP#20	PTBG0064KB-A	768 Kbytes	256 Kbytes	Not included	120 MHz	Not available	Available*1	Not available
R5F56517FGBP	R5F56517FGBP#20	PTBG0064KB-A	768 Kbytes	256 Kbytes	Not included	120 MHz	Available	Available*1	Not available
R5F56514BGBP	R5F56514BGBP#20	PTBG0064KB-A	512 Kbytes	256 Kbytes	Not included	120 MHz	Not available	Available*1	Not available
R5F56514FGBP	R5F56514FGBP#20	PTBG0064KB-A	512 Kbytes	256 Kbytes	Not included	120 MHz	Available	Available*1	Not available

Table 5. List of RX651 Group G-version Products (2/2)

Part No.	Part No. (for Orders)	Package	Code Flash Memory Capacity	RAM Capacity	Data Flash Memory Capacity	Operating Frequency (Max.)	Encryption Module	SDHI/SDSI	Dual Bank
R5F5651EDGLC	R5F5651EDGLC#20	PTLG0177KA-A	2 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Not available	Available	Available
R5F5651EHGLC	R5F5651EHGLC#20	PTLG0177KA-A	2 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Available	Available	Available
R5F5651CDGLC	R5F5651CDGLC#20	PTLG0177KA-A	1.5 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Not available	Available	Available
R5F5651CHGLC	R5F5651CHGLC#20	PTLG0177KA-A	1.5 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Available	Available	Available
R5F5651EDGLK	R5F5651EDGLK#20	PTLG0145KA-A	2 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Not available	Available	Available
R5F5651EHGLK	R5F5651EHGLK#20	PTLG0145KA-A	2 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Available	Available	Available
R5F5651CDGLK	R5F5651CDGLK#20	PTLG0145KA-A	1.5 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Not available	Available	Available
R5F5651CHGLK	R5F5651CHGLK#20	PTLG0145KA-A	1.5 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Available	Available	Available
R5F56519AGLK	R5F56519AGLK#20	PTLG0145KA-A	1 Mbyte	256 Kbytes	Not included	120 MHz	Not available	Not available	Not available
R5F56519BGLK	R5F56519BGLK#20	PTLG0145KA-A	1 Mbyte	256 Kbytes	Not included	120 MHz	Not available	Available	Not available
R5F56519EGLK	R5F56519EGLK#20	PTLG0145KA-A	1 Mbyte	256 Kbytes	Not included	120 MHz	Available	Not available	Not available
R5F56519FGLK	R5F56519FGLK#20	PTLG0145KA-A	1 Mbyte	256 Kbytes	Not included	120 MHz	Available	Available	Not available
R5F56517AGLK	R5F56517AGLK#20	PTLG0145KA-A	768 Kbytes	256 Kbytes	Not included	120 MHz	Not available	Not available	Not available
R5F56517BGLK	R5F56517BGLK#20	PTLG0145KA-A	768 Kbytes	256 Kbytes	Not included	120 MHz	Not available	Available	Not available
R5F56517EGLK	R5F56517EGLK#20	PTLG0145KA-A	768 Kbytes	256 Kbytes	Not included	120 MHz	Available	Not available	Not available
R5F56517FGLK	R5F56517FGLK#20	PTLG0145KA-A	768 Kbytes	256 Kbytes	Not included	120 MHz	Available	Available	Not available
R5F56514AGLK	R5F56514AGLK#20	PTLG0145KA-A	512 Kbytes	256 Kbytes	Not included	120 MHz	Not available	Not available	Not available
R5F56514BGLK	R5F56514BGLK#20	PTLG0145KA-A	512 Kbytes	256 Kbytes	Not included	120 MHz	Not available	Available	Not available
R5F56514EGLK	R5F56514EGLK#20	PTLG0145KA-A	512 Kbytes	256 Kbytes	Not included	120 MHz	Available	Not available	Not available
R5F56514FGLK	R5F56514FGLK#20	PTLG0145KA-A	512 Kbytes	256 Kbytes	Not included	120 MHz	Available	Available	Not available
R5F5651EDGLJ	R5F5651EDGLJ#20	PTLG0100JA-A	2 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Not available	Available	Available
R5F5651EHGLJ	R5F5651EHGLJ#20	PTLG0100JA-A	2 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Available	Available	Available
R5F5651CDGLJ	R5F5651CDGLJ#20	PTLG0100JA-A	1.5 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Not available	Available	Available
R5F5651CHGLJ	R5F5651CHGLJ#20	PTLG0100JA-A	1.5 Mbytes	640 Kbytes	32 Kbytes	120 MHz	Available	Available	Available
R5F56519AGLJ	R5F56519AGLJ#20	PTLG0100JA-A	1 Mbyte	256 Kbytes	Not included	120 MHz	Not available	Not available	Not available
R5F56519BGLJ	R5F56519BGLJ#20	PTLG0100JA-A	1 Mbyte	256 Kbytes	Not included	120 MHz	Not available	Available	Not available
R5F56519EGLJ	R5F56519EGLJ#20	PTLG0100JA-A	1 Mbyte	256 Kbytes	Not included	120 MHz	Available	Not available	Not available
R5F56519FGLJ	R5F56519FGLJ#20	PTLG0100JA-A	1 Mbyte	256 Kbytes	Not included	120 MHz	Available	Available	Not available
R5F56517AGLJ	R5F56517AGLJ#20	PTLG0100JA-A	768 Kbytes	256 Kbytes	Not included	120 MHz	Not available	Not available	Not available
R5F56517BGLJ	R5F56517BGLJ#20	PTLG0100JA-A	768 Kbytes	256 Kbytes	Not included	120 MHz	Not available	Available	Not available
R5F56517EGLJ	R5F56517EGLJ#20	PTLG0100JA-A	768 Kbytes	256 Kbytes	Not included	120 MHz	Available	Not available	Not available
R5F56517FGLJ	R5F56517FGLJ#20	PTLG0100JA-A	768 Kbytes	256 Kbytes	Not included	120 MHz	Available	Available	Not available
R5F56514AGLJ	R5F56514AGLJ#20	PTLG0100JA-A	512 Kbytes	256 Kbytes	Not included	120 MHz	Not available	Not available	Not available
R5F56514BGLJ	R5F56514BGLJ#20	PTLG0100JA-A	512 Kbytes	256 Kbytes	Not included	120 MHz	Not available	Available	Not available
R5F56514EGLJ	R5F56514EGLJ#20	PTLG0100JA-A	512 Kbytes	256 Kbytes	Not included	120 MHz	Available	Not available	Not available
R5F56514FGLJ	R5F56514FGLJ#20	PTLG0100JA-A	512 Kbytes	256 Kbytes	Not included	120 MHz	Available	Available	Not available

Note 1. Only SDHI is available.