# Old Company Name in Catalogs and Other Documents

On April 1<sup>st</sup>, 2010, NEC Electronics Corporation merged with Renesas Technology Corporation, and Renesas Electronics Corporation took over all the business of both companies. Therefore, although the old company name remains in this document, it is a valid Renesas Electronics document. We appreciate your understanding.

Renesas Electronics website: http://www.renesas.com

April 1<sup>st</sup>, 2010 Renesas Electronics Corporation

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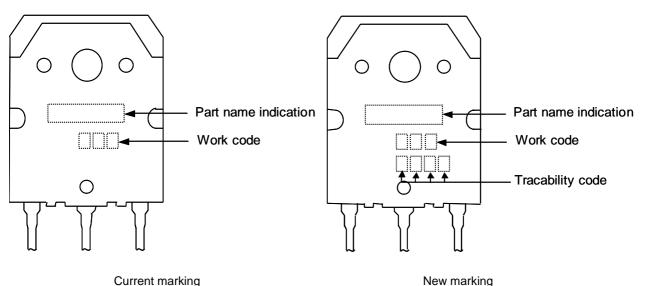
# **RENESAS TECHNICAL UPDATE**

Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100-0004, Japan Renesas Technology Corp.

Category	Transistors		Document No.	TN-PTR-A001A/E	Rev.	1.00
Title	PCN of Marking for Power Transistors		Information Category	Change of Packages		
Product	All of TO-3P,TO-3PFM,TO-220AB, TO-220FM,TO-220CFM,LDPAK, DPAK,LFPAK,LFPAK-i,WPAK and TSSOP-8	Lot No. All	Reference Document			
Renesas Technology will change the marking of TO-3P,TO-3PFM,TO-220AB, TO-220FM,TO-220CFM, LDPAK, DPAK,LFPAK,LFPAK-I,WPAK and TSSOP-8. Except Automotive specification. New marking is already applied to Automotive parts.						
1. Applicability TO-3P,TO-3PFM,TO-220AB, TO-220FM,TO-220CFM,LDPAK, DPAK,LFPAK,LFPAK-I,WPAK and TSSOP-8 packaged transistor.						
2. Purpose Improvement of tracability						
<ul><li>3. Schedule</li><li>Production by new specification will strat from 2008/Apr.</li><li>New and old specification may be shipped in disorder by condition of stock.</li></ul>						
4. Characteristics There are no change for maximum ratings, characteristics, reliability, outline or etc.						



- 5. Cahanging of Marking and Applied Products
  - 5.1. Cahanging of Marking for TO-3P and TO-3PFM
    - [ Example for TO-3P(Note:The marking for TO-3PFM is same layout.) ]



# 5.2. Applied Products for TO-3P

TO-3P packaged transistor including special specification or custom parts that are not written on follow will be applied. 2SB1032K,2SB1079,2SC3336,2SC3365,2SD1436K,2SD1559,2SD2256

2SJ160,2SJ161,2SJ162,2SJ215,2SJ217,2SJ351,2SJ352,2SJ554,2SJ555, 2SK1056,2SK1057,2SK1058, 2SK1161, 2SK1162,2SK1165,2SK1166,2SK1166,2SK1167,2SK1168, 2SK1169,2SK1170, 2SK1298,2SK1303,2SK1304,2SK1317, 2SK1339,2SK1340,2SK1341,2SK1342,2SK1401A,2SK1403A,2SK1515,2SK1516, 2SK1517,2SK1518,2SK1573,2SK1669, 2SK1671,2SK1773,2SK1835,2SK1933,2SK1934,2SK1968,2SK2007,2SK2220,2SK2221,2SK2554,2SK2568,2SK2586, 2SK2727,2SK2728,2SK2729,2SK2730,2SK2955,2SK3151, 2SK3159,2SK3163, 2SK3235,2SK3419 H5N1503P,H5N1506P,H5N2003P,H5N2008P,H5N2305P,H5N2501P,H5N2503P,H5N2507P,H5N2509P,H5N2514P, H5N2515P,H5N2519P,H5N2801P,H5N2802P,H5N2803P,H5N3003P,H5N3004P,H5N3008P,H5N3011P,H5N5007P, H5N5015P,H5N6001P

RJK1529DPK,RJK2009DPK,RJK2508DPK,RJK2511DPK,RJK2916DPK,RJK3008DPK,RJK3016DPK,RJK4018DPK, RJK4514DPK,RJK4515DPK,RJK4518DPK,RJK5010DPK,RJK5013DPK,RJK5014DPK, RJK5015DPK,RJK5018DPK, RJK5020DPK,RJK6014DPK,RJK6015DPK,RJK6018DPK,RJK6020DPK

GN6060V5DP,GN6065V5DP

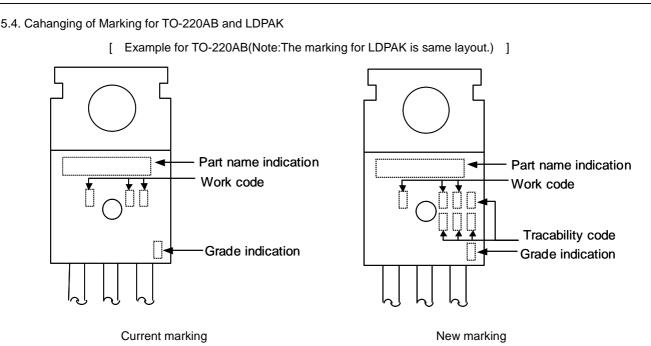
RJH6007DPK,RJP2557DPK,RJP3057DPK,RJP3067DPK,RJP4067DPK,RJP6006DPK,RJP6085DPK

# 5.3. Applied Products for TO-3PFM

TO-3PFM packaged transistor including special specification or custom parts that are not written on follow will be applied. 2SC5480

2SJ216,2SJ218, 2SK1328,2SK1329,2SK1405,2SK1670,2SK1775,2SK1832,2SK1859,2SK2008,2SK2225 H5N2301PF,H5N2305PF,H5N2306PF,H5N2509PF,H5N2803PF,RJK2009DPM,RJH6075DPM





# 5.5. Applied Products for TO-220AB

TO-220AB packaged transistor including special specification or custom parts that are not written on follow will be applied. 2SB566K,2SB566AK,2SB727K,2SB765K,2SB791K,2SB857,2SB858,2SB859,2SB860,2SB861, 2SB955K,2SB1091, 2SB1103,2SC1881K,2SC2612,2SC2613,2SC2816,2SC2979,2SC4913,2SD476K, 2SD476AK,2SD768K,2SD864K, 2SD970K,2SD1113K,2SD1126K,2SD1133,2SD1134,2SD1135, 2SD1137,2SD1138,2SD1163A,2SD1527 2SJ76,2SJ77,2SJ78,2SJ79,2SJ117,2SJ172,2SJ173,2SJ174,2SJ221,2SJ247,2SJ292,2SJ539, 2SJ540,2SJ541,2SJ542, 2SJ543,2SJ544, 2SK213,2SK214,2SK215,2SK216,2SK970,2SK971,2SK972, ,2SK1153,2SK1154,2SK1155, 2SK1156, 2SK1157,2SK1158,2SK1159,2SK1160,2SK1302,2SK1338,2SK1400A,2SK1402A,2SK1627, 2SK1667,2SK1761,2SK1807, 2SK2328,2SK2408,2SK2800,2SK2927,2SK2928,2SK2929,2SK2930, 2SK2931,2SK2959,2SK3069,2SK3136,2SK3141, 2SK3149,2SK3154,2SK3156,2SK3158,2SK3228, 2SK3418,2SK3736 H7N0203AB,H7N0307AB,H7N0308AB,H7N0312AB, H7N0602AB, H7N0603AB,H7N0608AB,H7N1002AB,H7N1004AB,

H8N0801AB,HS76654,HS76655

GN6030V4AB,RJP3054DPN,RJP3064DPN,RJP3065DPN,RJP6065DPN

# 5.6. Applied Products for LDPAK

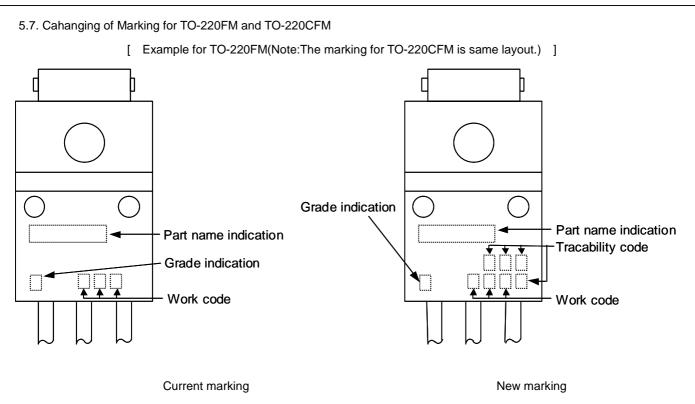
LDPAK packaged transistor including special specification or custom parts that are not written on follow will be applied. 2SJ214L/S,2SJ220L/S,2SJ280L/S,2SJ296L/S,2SJ297L/S,2SJ409L/S,2SJ479L/S,2SJ505L/S, 2SJ549L/S,2SJ550L/S, 2SJ551L/S,2SJ552L/S,2SJ553L/S, 2SK1313L/S,2SK1314L/S,2SK1315L/S,2SK1316L/S,2SK1528L/S, 2SK1620L/S, 2SK1623L/S, 2SK1636L/S,2SK1647L/S,2SK2553L/S,2SK2684L/S,2SK2912L/S,2SK2938L/S,2SK2939L/S, 2SK2940L/S, 2SK2957L/S,2SK2958L/S,2SK3070L/S,2SK3082L/S,2SK3134L/S,2SK3135L/S,2SK3150L/S,2SK3161L/S,2SK3210L/S, 2SK3211L/S

H5N2001LS, H5N2007LS, H5N2307LS, H5N2901LS, H5N3007LS, H5N3301LS H7N0307LD/LS, H7N0308LD/LS, H7N0307LD/LS, H7N0308LD/LS, H7N0310LD/LS, H7N0311LD/LS, H7N0312LD/LS, H7N0602LD/LS/LM, H7N0606LD/LS, H7N1002LD/LS/LM, H7N1004LD/LS, H7N1005LD/LS, H8N0603LD

RJK1525DPJ/DPE/DPF,RJK1526DPE/DPF,RJK1535DPE,RJK2017DPE,RJK4013DPE,RJK4514APE, RJK6012DPE, RJK6026DPE

GN6020V4LS,GN6030V4LS,RJP6003DPE





5.8. Applied Products for TO-220FM

TO-220FM packaged transistor including special specification or custom parts that are not written on follow will be applied. 2SB1262,2SB1389,2SB1390,2SB1391,2SB1392,2SB1399,2SB1400,2SB1530,2SC5022,2SD1900, 2SD2101,2SD2106, 2SD2337

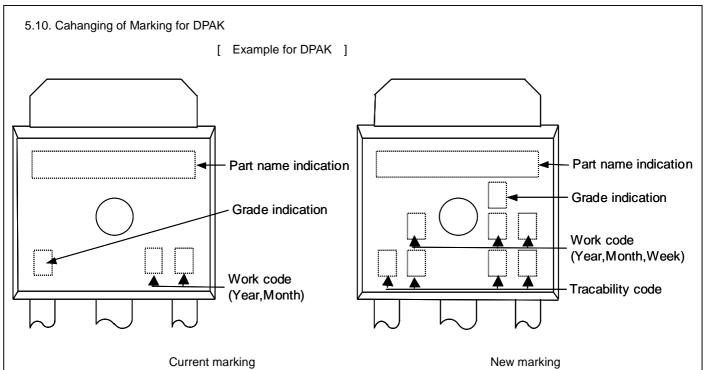
2SJ175,2SJ176,2SJ177,2SJ222,2SJ248,2SJ293,2SJ294,2SJ295,2SJ350,2SJ504,2SJ526, 2SJ534,2SJ535,2SJ547, 2SJ548, 2SK1093,2SK1094,2SK1095,2SK1305,2SK1306,2SK1307,2SK1318,2SK1404,2SK1566,2SK1567, 2SK1572, 2SK1626, 2SK1637,2SK1668,2SK1762,2SK1808,2SK1957,2SK2202,2SK2937,2SK3148, 2SK3152,2SK3155,2SK3157, 2SK3160,2SK3162,2SK3177,2SK3209,2SK3212,2SK3308 H5N5001FM,H5N5006FM,H7N0608FM,H7N1004FM,H7N1005FM

# 5.9. Applied Products for TO-220CFM

TO-220CFM packaged transistor including special specification or custom parts that are not written on follow will be applied.

2SJ471,2SJ532,2SJ533,2SJ545,2SJ546, 2SK2114,2SK2424,2SK2425,2SK2529,2SK2725,2SK2726, 2SK2736, 2SK2737, 2SK2738,2SK2932, 2SK2933,2SK2934,2SK2935,2SK2936,2SK2956,2SK3140,2SK3142,2SK3229, ,2SK3233,2SK3234, H5N2502CF,H5N2512CF,H5N3007CF,H7N0308CF,RJK1525DPS GN6030V5CF,RJP3063DPP, RJP4065DPP





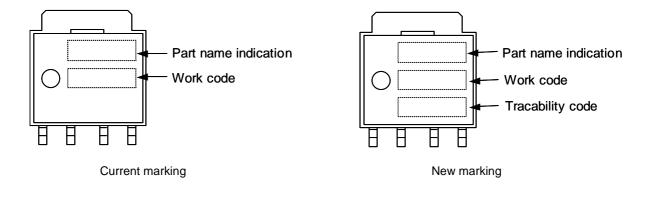
5.11. Applied Products for DPAK

DPAK packaged transistor including special specification or custom parts that are not written on follow will be applied. 2SB1072L/S,2SB1407L/S,2SB1661S,2SB1681S,2SC4500L/S,2SD2115L/S, 2SD2123L/S, 2SD2124L/S,2SD2592S, 2SD2632S

2SJ130L/S,2SJ181L/S,2SJ182L/S,2SJ234L/S,2SJ245L/S,2SJ246L/S,2SJ279L/S,2SJ318L/S, 2SJ319L/S,2SJ332L/S, 2SJ387L/S,2SJ389L/S,2SJ506L/S,2SJ527L/S,2SJ528L/S,2SJ529L/S,2SJ530L/S,2SK973LS,2SK974L/S,2SK1151L/S, 2SK1152L/S,2SK1254L/S,2SK1299L/S,2SK1335L/S, 2SK1838L/S,2SK1880L/S, 2SK1949L/S,2SK2059L/S,2SK2084L/S, 2SK2329L/S,2SK2735L/S,2SK2796L/S,2SK2869L/S,2SK2925L/S,2SK2926L/S,2SK3147L/S,2SK3274L/S H5N2004DL/DS,H5N2005DL/DS,H5N2504DL/DS,H5N2505DL/DS,H5N2508DL/DS,H5N2510DL/DS, H5N5006DL/DS, H7N0603DL/DS,H7N0607DL/DS,H7N1004DL/DS,H7N1005DL/DS,H7P0601DL/DS,H7N1002DL/DS

5.12. Cahanging of Marking for LFPAK and LFPAK-i

[ Example for LFPAK(Note:The marking for LFPAK-i is same layout.) ]





# 5.13. Applied Products for LFPAK

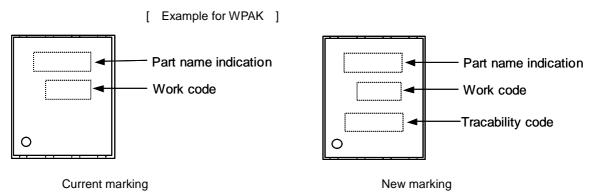
LFPAK packaged transistor including special specification or custom parts that are not written on follow will be applied. HAT1072H,HAT1125H,HAT1127H,HAT1139H,HAT2096H,HAT2099H,HAT2116H,HAT2129H,HAT2134H, HAT2137H, HAT2139H,HAT2140H,HAT2141H,HAT2142H,HAT2143H,HAT2160H,HAT2164H,HAT2165H, HAT2166H,HAT2167H, HAT2168H,HAT2169H,HAT2170H,HAT2171H,HAT2172H,HAT2173H,HAT2174H, HAT2175H,HAT2261H,HAT2265H, HAT2266H,HAT2267H,HAT2270H,HAT2279H

RJK0301DPB,RJK0302DPB,RJK0303DPB,RJK0304DPB,RJK0305DPB,RJK0328DPB,RJK0329DPB, RJK0330DPB, RJK0331DPB,RJK0332DPB,RJK0372DPB

# 5.14. Applied Products for LFPAK-i

LFPAK –i packaged transistor including special specification or custom parts that are not written on follow will be applied. HAT2160N,HAT2164N,HAT2165N,HAT2166N,HAT2167N,HAT2168N,HAT2169N,HAT2170N,HAT2171N, HAT2172N, HAT2173N,HAT2174N,HAT2175N,HAT2261N,HAT2265N,HAT2266N,HAT2279N RJK0301DPC,RJK0302DPC,RJK0303DPC,RJK0304DPC,RJK0305DPC

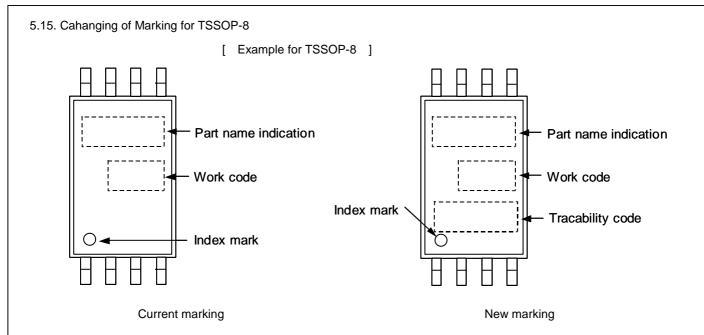
# 5.15. Cahanging of Marking for WPAK



# 5.16. Applied Products for WPAK

WPAK packaged transistor including special specification or custom parts that are not written on follow will be applied. HAT1101WP,HAT1107WP,HAT2087WP,HAT2089WP,HAT2183WP,HAT2184WP,HAT2185WP,HAT2187WP, HAT2188WP, HAT2189WP,HAT2191WP,HAT2191WP,HAT2192WP,HAT2193WP,HAT2195WP,HAT2197WP, HAT2198WP,HAT2199WP, HAT2200WP,HAT2201WP,HAT2209WP,HAT2210WP,HAT2211WP.HAT2244WP, HAT2285WP,HAT2287WP,HAT2299WP RJK0316DPA,RJK0317DPA,RJK0346DPA,RJK0347DPA,RJK0348DPA,RJK0349DPA,RJK0350DPA, RJK0351DPA, RJK0353DPA,RJK0355DPA,RJK0356DPA,RJK0358DPA,RJK0359DPA,RJK0360DPA, RJK0364DPA,RJK0365DPA, RJK0366DPA,RJK0369DPA





5.16. Applied Products for TSSOP-8

TSSOP-8 packaged transistor including special specification or custom parts that are not written on follow will be applied. HAT1033T, HAT1041T, HAT1065T, HAT2050T, HAT2051T, HAT2080T, HAT2085T, HAT2105T, HAT3015T

