

To our customers,

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## Old Company Name in Catalogs and Other Documents

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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

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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# RENESAS TECHNICAL UPDATE

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Renesas Technology Corp.

|                    |   |         |                      |  |      |      |
|--------------------|---|---------|----------------------|--|------|------|
| Product Category   | MPU/MCU   |         | Document No.         | TN-450-A011A/E   | Rev. | 1.00 |
| Title              | 4501, 4502, 4506, 4507, 4508, and 4509 Groups<br>Correction of the Misprinted Electrical Characteristics in Datasheet and Customer's Std. Specifications (Supply Current and A/D Operation Current) |         | Information Category | Technical Notification   |      |      |
| Applicable Product | 4501 Group, 4502 Group<br>4506 Group, 4507 Group<br>4508 Group, 4509 Group  | Lot No. | Reference Document   | 4501 Group, 4502 Group<br>4506 Group, 4507 Group<br>4508 Group, 4509 Group<br><br>Datasheet and Customer 's Std. Spec. |      |      |
|                    |   | ---     |                      |  |      |      |

Please be advised that the datasheet and customer's std. specifications of the above products have been revised due to corrections made to notes of the supply current characteristics (IDD) and A/D operation current (IADD).

## 1. Applicable Datasheet and Customer's Std. Specifications

| Group      | Part No.   | Datasheet                                 | Customer's std. specifications   |
|------------|--|---|--|
| 4501 Group | M34501E4FP<br>M34501M2-XXXFP<br>M34501M4-XXXFP   | 4501 Group Datasheet<br>(REJ03B0104-0301) | GNOK-M34501E4FP-00<br>GNOK-M34501M2-XXXFP-00<br>GNOK-M34501M4-XXXFP-00   |
| 4502 Group | M34502E4FP<br>M34502M2-XXXFP<br>M34502M4-XXXFP   | 4502 Group Datasheet<br>(REJ03B0105-0301) | GNOK-M34502E4FP-00<br>GNOK-M34502M2-XXXFP-00<br>GNOK-M34502M4-XXXFP-00   |
| 4506 Group | M34506E4FP<br>M34506M2-XXXFP<br>M34506M4-XXXFP   | 4506 Group Datasheet<br>(REJ03B0106-0301) | GNOK-M34506E4FP-00<br>GNOK-M34506M2-XXXFP-00<br>GNOK-M34506M4-XXXFP-00   |
| 4507 Group | M34507E4FP<br>M34507M2-XXXFP<br>M34507M4-XXXFP   | 4507 Group Datasheet<br>(REJ03B0107-0301) | GNOK-M34507E4FP-00<br>GNOK-M34507M2-XXXFP-00<br>GNOK-M34507M4-XXXFP-00   |
| 4508 Group | M34508G4FP<br>M34508G4GP<br>M34508G4-XXXFP<br>M34508G4-XXXGP<br>M34508G4HFP<br>M34508G4HGP<br>M34508G4H-XXXFP<br>M34508G4H-XXXGP | 4508 Group Datasheet<br>(REJ03B0148-0102) | GNOK-M34508G4FP-00<br>GNOK-M34508G4GP-00<br>GNOK-M34508G4-XXXFP-00<br>GNOK-M34508G4-XXXGP-00<br>GNOK-M34508G4HFP-00<br>GNOK-M34508G4HGP-00<br>GNOK-M34508G4H-XXXFP-00<br>GNOK-M34508G4H-XXXGP-00 |
| 4509 Group | M34509G4FP<br>M34509G4-XXXFP<br>M34509G4HFP<br>M34509G4H-XXXFP   | 4509 Group Datasheet<br>(REJ03B0147-0102) | GNOK-M34509G4FP-00<br>GNOK-M34509G4-XXXFP-00<br>GNOK-M34509G4HFP-00<br>GNOK-M34509G4H-XXXFP-00   |

## 2. Revisions

Notes of the supply current characteristics (IDD) and A/D operation current (IADD) have been revised as follows.

These corrections only apply to the English datasheet and customer std. specification. No revisions were made to the Japanese datasheet and customer std. specification.

### Before (Incorrect)

- Electrical characteristics "IDD"

Notes 1: When the A/D converter is used, the A/D operation current (IADD) is included.

- A/D converter characteristics "IADD"

Notes 1: When the A/D converter is used, the IADD is included to IDD.

### After (Correct)

- Electrical characteristics "IDD"

Notes 1: When the A/D converter is used, the A/D operation current (IADD) is added.

- A/D converter characteristics "IADD"

Notes 1: When the A/D converter is used, the IADD is added to IDD.