## **Product Change Notices**

PCN No.:PCN20210601

Date: 6/9/2021

This is to inform you that AME8867 datasheet has been changed from Rev. A.01 to Rev. B.01. This notification is for your information and concurrence.

If you require Qual/Rel data or samples to qualify this change, please contact AME, Inc. directly or through AME's authorized Sales Representative or Distributor within 30 days.

Please note this PCN will be effective 30 days after the issuing date automatically if we do not receive any response, comment or questions from you.

If you have any questions concerning this change, please contact:

### **PCN Originator:**

Name: Michael Chang

Email: michaelc@ame.com.tw

### **Reason for Change:**

Comply with product performance.

### 1. Revised Features on Page1

#### From:

### **Rev. A.01**

### ■ Features

- 2.7V to 36V Wide Input Voltage Range
- Output Voltage Tolerance: <u>+</u>2%
- Maximum Output Current: 250mA
- Ultra Low Quiescent Current: 2.5μA
- 1.2V Typical Low Dropout Voltage at 250mA Load Current
- Fixed, 3.3V and 5V Output Voltage Options
- Internal Over Temperature Protection
- Internal Over Current Protection
- Stable With Low ESR Ceramic Output Capacitor
- Maximum Under Full Temperature



To:

**Rev. B.01** 

### ■ Features

- 4.75V to 36V Wide Input Voltage Range
- Output Voltage Tolerance: +2%
- Maximum Output Current: 250mA
- Ultra Low Quiescent Current: 1.5μA(typical)
- 1.2V Typical Low Dropout Voltage at 250mA Load Current
- Internal Over Temperature Protection
- Internal Over Current Protection
- Stable With Low ESR Ceramic Output Capacitor

# 2. Add new SOT-25 Package Pin Configuration on Page4

From:

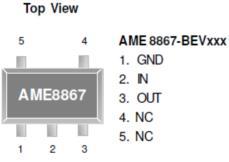
**Rev. A.01** 

NA

To:

**Rev. B.01** 

SOT-25



\* Die Attach: Non-Conductive Epoxy

# 3. Add new AME8867-BEVxxx Pin Description on Page5

From:

**Rev. A.01** 

NA



To:

## **Rev. B.01**

# **■ Pin Description**

| Pin<br>Name | Pin<br>Description  | Pin Number |    |        |    |           |    |      |          |     |            |
|-------------|---------------------|------------|----|--------|----|-----------|----|------|----------|-----|------------|
|             |                     | SOT-23     |    | SOT-89 |    | SOT-223 S |    | T-25 | SOP-8/PP |     |            |
| Hamo        | Description         |            | В  | O      | Α  | В         | С  | Α    | Α        | В   | Α          |
| IN          | Input Voltage pin   | 1          | 2  | 3      | 1  | 2         | 3  | 1    | 1        | 2   | 8          |
| GND         | Ground.             | 3          | 3  | 1      | 2  | 1         | 2  | 2    | 2        | 1   | 2, 3, 6, 7 |
| OUT         | Output Voltage pin. | 2          | 1  | 2      | 3  | 3         | 1  | 3    | 5        | 3   | 1          |
| EN          | Enable pin.         | NA         | NA | NA     | NA | NA        | NA | NA   | 3        | NA  | 5          |
| NC          | No connection.      | NA         | NA | NA     | NA | NA        | NA | NA   | 4        | 4/5 | 4          |

# 4. Add new AME8867-BEVxxx in Ordering Information on Page6

From:

**Rev. A.01** 

NA

To:

**Rev. B.01** 

■ Ordering Information



| Pin C                      | onfiguration                                | Package Type                         | Number of Pins       | Output Voltage                      |
|----------------------------|---|--------------------------------------|----------------------|-------------------------------------|
| A<br>(SOT-23)              | 1. IN<br>2. OUT<br>3. GND                   | E: SOT-2X<br>F: SOT-89<br>G: SOT-223 | T: 3<br>V: 5<br>A: 8 | 330: 3.3V<br>440: 4.4V<br>500: 5.0V |
| B<br>(SOT-23)              | 1. OUT<br>2. IN<br>3. GND                   | Z: SOP-8/PP                          |                      |                                     |
| C<br>(SOT-23)              | 1. GND<br>2. OUT<br>3. IN                   |                                      |                      |                                     |
| A<br>(SOT-89)<br>(SOT-223) | 1. IN<br>2. GND<br>3. OUT                   |                                      |                      |                                     |
| B<br>(SOT-89)              | 1. GND<br>2. IN<br>3. OUT                   |                                      |                      |                                     |
| C<br>(SOT-89)              | 1. OUT<br>2. GND<br>3. IN                   |                                      |                      |                                     |
| A<br>(SOT-25)              | 1. IN<br>2. GND<br>3. EN<br>4. NC<br>5. OUT |                                      |                      |                                     |
| B<br>(SOT-25)              | 1. GND<br>2. IN<br>3. OUT<br>4. NC<br>5. NC |                                      |                      |                                     |

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# 5. Revised Rating in Recommended Operating Conditions on Page7 From:

**Rev. A.01** 

## ■ Recommended Operating Conditions

| Parameter     | Symbol   | Rating    | Unit |
|---------------|----------|-----------|------|
| Input Voltage | $V_{IN}$ | 2.7 to 36 | V    |

To:

**Rev. B.01** 

## ■ Recommended Operating Conditions

| Parameter     | Symbol          | Rating     | Unit |
|---------------|-----------------|------------|------|
| Input Voltage | $V_{\text{IN}}$ | 4.75 to 36 | V    |
| Input Voltage | V <sub>IN</sub> | 4.75 to 36 |      |

## 6. Add SOT-25 Package Thermal Information on Page8

From:

**Rev. A.01** 

NA

To:

## **Rev. B.01**

| Parameter                  | Package | Die Attach            | Symbol         | Maximum | Unit |
|----------------------------|---------|-----------------------|----------------|---------|------|
|                            | SOT-23  | Conductive Epoxy      |                | 81      |      |
|                            | 301-23  | Non-Conductive Epoxy  | Ī              | 140     |      |
|                            | SOT-25  | Conductive Epoxy      | ]              | 81      |      |
| Thermal Resistance*        | 501-25  | Non-Conductive Epoxy  | A.c.           | 140     | °C/W |
| (Junction to Case)         |         | Conductive Epoxv      | T UC           | 40      | 3C/W |
|                            | SOT-25  | Conductive Epoxy      |                | 260     |      |
| Thermal Resistance         | 301-25  | Non-Conductive Epoxy  | θ.,            | 260     | °C/W |
| (Junction to Ambient)      |         | Conductive Epoxy      | · JA           | 180     | C/W  |
| 1                          | SOT-25  | Conductive Epoxy      |                | 400     | L    |
|                            | 301-25  | Non-Conductive Epoxy  |                | 400     |      |
| Internal Power Dissipation | SOT-89  | Conductive Epoxy      | P <sub>D</sub> | 550     | mW   |
|                            | 301-89  | Non Conductive Energy | Ī              | EE0     |      |

## 7. Revised Electrical Specifications on Page9

### From:

## **Rev. A.01**

## ■ Electrical Specifications

$$V_{\text{IN}}$$
= 5V,  $I_{\text{OUT}}$  = 1mA,  $C_{\text{IN}}$ =  $C_{\text{OUT}}$ = 1.0 $\mu$ F,  $T_{\text{J}}$ = 25°C, unless otherwise specified.

| Parameter                | Symbol               | Test Condition                  | Min | Тур  | Max  | Units |
|--------------------------|----------------------|---------------------------------|-----|------|------|-------|
| Input Voltage            | V <sub>IN</sub>      |                                 | 2.7 |      | 36   | V     |
| DC Output Accuracy       | V <sub>OUT</sub>     |                                 | -2% |      | 2%   | V     |
| Line Regulation          | $\triangle V_{LINE}$ | $V_{IN} = V_{OUT} + 1V$ to 36V  |     | 2    | 12   | mV    |
| Load Domitation          | ۸ ۷/                 | I <sub>OUT</sub> = 1mA to 100mA |     | 3    | 15   | mV    |
| Load Regulation          | $\triangle V_{LOAD}$ | I <sub>OUT</sub> = 1mA to 250mA |     | 15   | 50   | IIIV  |
| Dropout Voltage (Note 1) | V <sub>DROP</sub>    | I <sub>OUT</sub> = 100mA        |     | 400  | 720  | m\/   |
| Dropout Voltage (Note1)  |                      | I <sub>OUT</sub> = 250mA        |     | 1200 | 2160 | mV    |

### To:

## **Rev. B.01**

## ■ Electrical Specifications

$$\boxed{V_{\text{IN}} = V_{\text{OUT}} + 2V, \text{I}_{\text{OUT}} = 1 \text{mA, C}_{\text{IN}} = C_{\text{OUT}} = 1.0 \mu\text{F, T}_{\text{J}} = 25 ^{\circ}\text{C, unless otherwise specified.}}$$

| Parameter               | Symbol               | Test Condition                            | Min  | Тур  | Max                 | Units |
|-------------------------|----------------------|---|------|------|---------------------|-------|
| Input Voltage           | $V_{IN}$             |   | 4.75 |      | 36                  | ٧     |
| DC Output Accuracy      | V <sub>OUT</sub>     |   | -2%  |      | 2%                  | ٧     |
| Line Regulation         | $\triangle V_{LINE}$ | $V_{IN} = V_{OUT} + 1.5V \text{ to } 36V$ |      | 2    | 12                  | mV    |
| 1 10 12                 | AV                   | I <sub>OUT</sub> = 1mA to 100mA           |      | 0.5  | 1                   | %     |
| Load Regulation         | $\triangle V_{LOAD}$ | I <sub>OUT</sub> = 1mA to 250mA           |      | 1    | 2                   | %     |
| December (Neted)        | V                    | I <sub>OUT</sub> = 100mA                  |      | 400  | 720                 | mV    |
| Dropout Voltage (Note1) | V <sub>DROP</sub>    | I <sub>OUT</sub> = 250mA                  |      | 1200 | 36<br>2%<br>12<br>1 | IIIV  |
|                         | 1                    |   |      |      |                     |       |