## Process / Product Change Notification

N° 770-PCN90-Public



Dear Customer,

Please find attached our INFINEON Technologies PCN:

GEM Shanghai (China) will be the alternate assembly site for the IPak products

Important information for your attention:

Infineon aligns with the widely-recognized JEDEC STANDARD "JESD46", which stipulates: "Lack of acknowledgment of the PCN within 30 days constitutes acceptance of the change."

Your prompt reply will help Infineon Technologies to assure a smooth and well executed transition. If Infineon does not hear from your side by the due date, we will assume your full acceptance to this proposed change and its implementation.

Your attention and response to this matter is greatly appreciated.



On January 13, 2015, Infineon Technologies acquired International Rectifier. The organization and business of former International Rectifier have been integrated into Infineon. That means that customer facing IT tools and processes like PCN, Information Note and Product Discontinuation are being merged consolidated. For further details please visit our website: http://www.infineon.com/powerfulcombination

Infineon Technologies AG Chairman of the Supervisory Board: Wolfgang Mayrhuber Management Board: Dr. Reinhard Ploss (CEO), Dominik Asam, Arunjai Mittal Registered Office: Neubiberg Commercial Register: München HRB 126492



N° 770-PCN90-Public

# Date:Tuesday, April 19, 2016PCR Reference:770PCN Reference:770-PCN90-Public

## To Our Valued Customer:

As always we appreciate your use of Infineon Technologies semiconductor products. Our commitment to customer satisfaction and continuous improvement is demonstrated by our change plans to enhance capacity, quality and reliability. This notice is to inform you of the following change:

We would like to express our sincere appreciation for your cooperation regarding the following changes, and Infineon Technologies will work closely with you to support your requirements during this transition.

#### Type of Change Notification:

Additional assembly site qualification

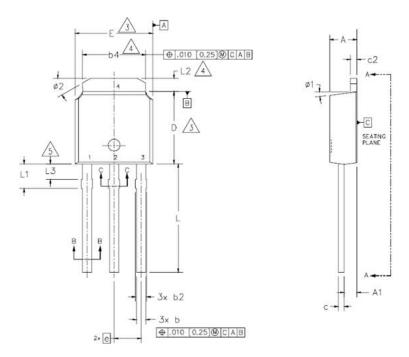
#### **Description of Change:**

GEM Shanghai (China) will be the alternate assembly site for the IPak products

As the result of this change, the Bill of Materials and POD at the new assembly site will be as follows:

| Material          | Before             | After              |
|-------------------|--------------------|--------------------|
| Die attach        | Material # 44-0153 | Material # 44-0312 |
| Wire interconnect | Material # 44-0199 | Material # 44-0199 |
| Mold compound     | Material # 44-0173 | Material # 44-0758 |
| Leadframe         | Material # 44-0159 | Material # 44-1522 |

POD Detail



## Process / Product Change Notification



| SYMBOL | SYMBOL DESCRIPTION           | IR<br>INCH |                   | JEDEC<br>INCH |             | GEM<br>INCH |      | DEMADIZO                                  |
|--------|------------------------------|------------|-------------------|---------------|-------------|-------------|------|---|
|        |                              |            |                   |               |             |             |      |   |
|        |                              | A          | Package thickness | .086          | .094        | .086        | .094 | .087                                      |
| A1     | Btm of leads to btm of pkg   | 035        | .045              | .350          | .050        | .035        | .045 | GEM is JEDEC & IR Compliant               |
| b      | Leadwidth(with plating)      | .025       | .035              | 025           | .035        | .026        | 035  | GEM is JEDEC & IR Compliant               |
| b2     | Standoff width(with plating) | .030       | .045              | .030          | .045        | .030        | .045 | GEM is JEDEC & IR Compliant               |
| .b4    | Thermal pad width width      | .195       | 215               | .195          | 215         | .197        | .215 | GEM is JEDEC & IR Compliant               |
| c      | Lead thickness(with plating) | .018       | .024              | 018           | 024         | .018        | .024 | GEM is JEDEC & IR Compliant               |
| c1     | Lead thickness(no plating)   | 016        | .022              | .016          | .022        | .016        | .022 | GEM is JEDEC & IR Compliant               |
| c2     | Heatsink thickness           | .018       | .035              | 018           | .035        | .018        | .035 | GEM is JEDEC & IR Compliant               |
| D      | Package height               | 235        | .245              | .235          | .245        | 236         | .244 | GEM is JEDEC & IR Compliant               |
| D1     | Thermal pad length           | 205        | -                 | 205           | +           | 205         | -    | GEM is JEDEC & IR Compliant               |
| E      | Package width                | 250        | .265              | 250           | 265         | 252         | 265  | GEM is JEDEC & IR Compliant               |
| E1     | Thermal pad width            | .170       |                   | 170           | · · · · · · | .170        |      | GEM is JEDEC & IR Compliant               |
| e      | Lead pitch                   | .090       | BSC               | .090          | BSC         | .090        | BSC  | GEM is JEDEC & IR Compliant               |
| L      | Total lead length            | 350        | .380              | .350          | .380        | .354        | 370  | GEM is JEDEC & IR Compliant               |
| L1     | Pkg to btm of lead stand off | .045       | .090              | .075          | .090        | 075         | .090 | GEM is JEDEC & IR Compliant               |
| L2     | Top of heat sink to mold pkg | .035       | .050              | .035          | .050        | .039        | .050 | GEM is JEDEC & IR Compliant               |
| L3     | Pkg to top of lead stand off | 045        | .060              | .045          | .060        | .037        | .047 | Minimum dim does not meet JEDEC & IR spec |

#### Reason for the Change:

Additional assembly capacity

#### Effect Date:

Monday, July 18, 2016

#### Impact of Change:

The package outline dimensions (POD) will be changed at the new assembly site (See description)

#### Method of Identifying Changed Product:

By date code and lot code product marking

#### **Products Affected:**

| IFAM Part     | Description   |
|---------------|---|
| IRFU1010ZPBF  | MOSFET, 55V, 91A, 7.5 mOhm, 63 nC Qg, I-Pak               |
| IRFU1018EPBF  | MOSFET, 60V, 79A, 8.4 mOhm, 46 nC Qg, I-Pak               |
| IRFU1205PBF   | MOSFET, 55V, 37A, 27 mOhm, 43.3 nC Qg, I-Pak              |
| IRFU12N25DPBF |   |
| IRFU13N20DPBF | MOSFET, 200V, 14A, 235 mOhm, 25 nC Qg, I-Pak              |
| IRFU15N20DPBF |   |
| IRFU18N15DPBF |   |
| IRFU2405PBF   | MOSFET, 55V, 56A, 16 mOhm, 70 nC Qg, I-Pak                |
| IRFU2407PBF   |   |
| IRFU24N15DPBF |   |
| IRFU3410PBF   | MOSFET, 100V, 31A, 39 mOhm, 37 nC Qg, I-Pak               |
| IRFU3411PBF   |   |
| IRFU3505PBF   |   |
| IRFU3607PBF   | MOSFET, 75V, 80A, 9.0 mOhm, 56 nC Qg, I-Pak               |
| IRFU3710ZPBF  | MOSFET, 100V, 56A, 18 mOhm, 69 nC Qg, I-Pak               |
| IRFU4104PBF   | MOSFET, 40V, 119A, 5.5 mOhm, 59 nC Qg, I-Pak              |
| IRFU4510PBF   | MOSFET, 100V, 63A, 13.9 mOhm, 54 nC Qg, I-Pak             |
| IRFU4615PBF   | MOSFET, 150V, 33A, 42mOhm, 26nC Qg, I-Pak                 |
| IRFU4620PBF   | MOSFET, 200V, 24A, 78mOhm, 25nC Qg, I-Pak                 |
| IRFU7440PBF   |   |
| IRLU2905PBF   |   |
| IRLU2908PBF   |   |
| IRLU3103PBF   | MOSFET, 30V, 46A, 19 mOhm, 33.3 nC Qg, Logic Level, I-Pak |
| IRLU3110ZPBF  | MOSFET, 100V, 63A, 14 mOhm, 34 nC Qg, Logic Level, I-Pak  |
| IRLU3114ZPBF  | MOSFET, 40V, 130A, 4.9 mOhm, 40 nC Qg, Logic Level, I-Pak |
| IRLU3636PBF   | MOSFET, 60V, 99A, 6.8 mOhm, 33 nC Qg, Logic Level, I-Pak  |
| IRLU3705ZPBF  | MOSFET, 55V, 89A, 8 mOhm, 44 nC Qg, Logic Level, I-Pak    |
| IRLU3915PBF   | MOSFET, 55V, 61A, 14 mOhm, 61 nC Qg, Logic Level, I-Pak   |

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| IFAM Part   | Description   |
|-------------|---|
| IRLU7833PBF |   |
| IRLU7843PBF | MOSFET, 30V, 161A, 3.3 mOhm, 34 nC Qg, Logic Level, I-Pak |
| IRLU8743PBF | MOSFET, 30V, 160A, 3.1 mOhm, 39 nC Qg, Logic Level, I-Pak |

### **Qualification:**

Parts passed all the reliability testing requirements. Reliability qualification report is available upon request.

#### **Supporting Data Availability:**

Contact Infineon Technologies for supporting data on this change.

#### **Contact Information:**

| CONTACT TYPE      | NAME            | PHONE | EMAIL                        |
|-------------------|-----------------|-------|------------------------------|
| PCN Coordinator   | Abigail Miciano |       | Abigail.Miciano@infineon.com |
| Technical Contact | Cesar Gonzales  |       | Cesar.Gonzales@infineon.com  |