

## Final Product/Process Change Notification Document #:FPCN23727X

Issue Date:28 Dec 2020

Title of Change:	Die attach solder supplier change to Heraeus since Honeywell end of business	
Proposed First Ship date:	01 Dec 2021 or earlier if approved by customer	
Contact Information:	Contact your local ON Semiconductor Sales Office or <a href="mailto:Spark.Zeng@onsemi.com">Spark.Zeng@onsemi.com</a>	
PCN Samples Contact:	Contact your local ON Semiconductor Sales Office or < PCN.samples@onsemi.com>.  Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change.  Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.	
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or KunChen.Ge@onsemi.com	
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change.  ON Semiconductor will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a>	
Marking of Parts/ Traceability of Change:	Customer may receive the parts from ON Semiconductor Shenzhen, China from month of Dec 2021 onwards once FPCN expires. Parts from ON Semiconductor Shenzhen, China can be identified through product marking which follow ON Semiconductor marking format.	
Change Category:	Assembly Change	
Change Sub-Category(s):	Supplier change	
Sites Affected:		
ON Semiconductor Sites		External Foundry/Subcon Sites
ON Semiconductor Shenzhen, China		None

#### **Description and Purpose:**

ON Semiconductor would like to inform its customers of a change in die attach material for the devices listed in this FPCN. This changes was due supplier change to Heraeus since Honeywell end of business.

	Before Change Description	After Change Description
Die Attach	Honeywell die attached solder (Sn/Ag25/Sb10)	Heraeus die attached solder (Pb/Sn5/Ag2.5)

There is no product marking change as a result of this change.

TEM001793 Rev. C Page 1 of 4



## Final Product/Process Change Notification

Document #:FPCN23727X Issue Date:28 Dec 2020

#### **Reliability Data Summary:**

**QV DEVICE NAME: BD681G** 

RMS: <u>U72025</u> PACKAGE: <u>Case77</u>

Test	Specification	Condition	Interval	Results
HTSL	JESD22-A103	Ta = 150°C	1000 hrs	0/240
TC	JESD22-A104	Ta=-55~150C	1000 cyc	0/240
H3TRB	JESD22-A101	Ta=85°C, 85% RH, 80% rated or 100V max	1000 hrs	0/240
uHAST	JESD22-A118	Temp= +130°C, RH=85%, p = 18.8 psig, unbiased 96 hrs		0/240
RSH	JESD22- B106	Ta = 265C, 10 sec		0/30

#### **Electrical Characteristics Summary:**

Electrical characteristics are not impacted.

#### **List of Affected Parts:**

**Note:** Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the <u>PCN Customized Portal</u>.

Part Number	Qualification Vehicle
BD681G	BD681G
MJE340G	BD681G
MJE3439G	BD681G
MJE344G	BD681G
2N6034G	BD681G
2N6035G	BD681G
2N6036G	BD681G
2N6038G	BD681G
2N6039G	BD681G
BD675AG	BD681G
BD675G	BD681G
BD676AG	BD681G
BD676G	BD681G
BD677AG	BD681G
BD677G	BD681G
BD678AG	BD681G
BD678G	BD681G
BD679AG	BD681G

TEM001793 Rev. C Page 2 of 4



# Final Product/Process Change Notification Document #:FPCN23727X Issue Date:28 Dec 2020

BD679G	BD681G
BD680AG	BD681G
BD680G	BD681G
MJE253G	BD681G
BD682G	BD681G
MJE700G	BD681G
MJE702G	BD681G
MJE703G	BD681G
MJE800G	BD681G
MJE802G	BD681G
MJE803G	BD681G
2N5190G	BD681G
2N5191G	BD681G
2N5192G	BD681G
2N5195G	BD681G
BD435G	BD681G
BD437G	BD681G
BD437TG	BD681G
BD439G	BD681G
BD441G	BD681G
BD442G	BD681G
MJE371G	BD681G
2N4918G	BD681G
2N4919G	BD681G
2N4920G	BD681G
2N4921G	BD681G
2N4922G	BD681G
2N4923G	BD681G
BD179G	BD681G
BD180G	BD681G
BD234G	BD681G
BD237G	BD681G
2N5657G	BD681G
BD159G	BD681G

TEM001793 Rev. C Page 3 of 4



## Final Product/Process Change Notification Document #:FPCN23727X

Issue Date:28 Dec 2020

MJE350G	BD681G
MJE270G	BD681G
BD135G	BD681G
BD135TG	BD681G
BD136G	BD681G
BD137G	BD681G
BD138G	BD681G
BD139G	BD681G
BD140G	BD681G
BD787G	BD681G
BD788G	BD681G
MJE170G	BD681G
MJE171G	BD681G
MJE172G	BD681G
MJE180G	BD681G
MJE181G	BD681G
MJE182G	BD681G
MJE200G	BD681G
MJE210G	BD681G
MJE243G	BD681G

TEM001793 Rev. C Page 4 of 4

## Japanese translation of the notification starts here. 通知の日本語訳はここから始まります。

**Note**: The Japanese version is for reference only. In case of any differences between the English and Japanese version, the English version shall control.

注:日本語版は参照用です。英語版と日本語版の違いがある場合は、英語版が優先されます.

## 最終製品/プロセス変更通知

文書番号#: FPCN23727X 発行日:28 Dec 2020

本百却 日の発別・	諾されたものとみなします。 お問い合わせは、< <u>PCN.Support@onsemi.com&gt;</u> 宛てにお願いします。	
変更部品の識別:	お客様はオン・セミコンダクター深セン (中国) からの製品を、FPCN の有効期限切れ後の 2021 年 12 月から 受け取ることになります。オン・セミコンダクター深セン (中国) からの製品は、オン・セミコンダクターのマーキング	
変更部品の識別:		
変更部品の識別:		
本再並 具の識別・		
	オン・セミコンダクターは、この通知の送付から30日以内に書面による問い合わせがない限り、この変更が承	
通知種別:	これは、お客様宛の最終製品 / プロセス変更通知 (FPCN) です。 FPCN は、変更実施の 90 日前に発行されます。	
	最寄りのオン・セミコンダクター営業所または < <u>KunChen.Ge@onsemi.com</u> >にお問い合わせください	
	サンプルは、この変更の初回通知、初回 PCN の日付から 30 日以内に要求してください。 サンプル納入時は、依頼日、数量、特別梱包材/ラベル条件によって異なります。	
サンプル:	現地のオン・セミコンダクター営業所または < <u>PCN.Samples@onsemi.com</u> > にお問い合わせください。	
連絡先情報:	現地のオン・セミコンダクター営業所または < <u>Spark.Zeng@onsemi.com</u> > にお問い合わせください。	
初回出荷予定日:	01 Dec 2021 またはお客様からの承認が得られた場合はそれ以前.	
変更件名:	Honeywell との取引終了に伴う Heraeus へのダイ接着はんだワイヤのサプライヤ変更	

#### 説明および目的:

オン・セミコンダクターは、本 FPCN に記載された製品のダイ接着剤の変更をお客様にお知らせいたします。この変更は、Honeywell との取引終了に伴い、サプライヤを Heraeus に変更したことによります。

	変更前の表記	変更後の表記
ダイ接着剤	Honeywell はんだワイヤ (Sn/Ag25/Sb10)	Heraeus はんだワイヤ (Pb/Sn5/Ag2.5)

今回の変更に伴う製品マーキングの変更はありません。

TEM001793 Rev. C 1/4 ページ

## 最終製品 / プロセス変更通知

文書番号#: FPCN23727X 発行日:28 Dec 2020

#### 信頼性データの要約:

デバイス名: <u>BD681G</u> RMS : <u>U72025</u> パッケージ : <u>Case77</u>

テスト	仕様	条件	間隔	結果
HTSL	JESD22-A103	Ta = 150°C	1000 hrs	0/240
TC	JESD22-A104	Ta=-55~150C	1000 cyc	0/240
H3TRB	JESD22-A101	Ta=85°C, 85% RH, 80% rated or 100V max	1000 hrs	0/240
uHAST	JESD22-A118	Temp= +130°C, RH=85% , p = 18.8 psig, unbiased	96 hrs	0/240
RSH	JESD22- B106	Ta = 265C, 10 sec		0/30

#### 電気的特性の要約:

電気的特性への影響はありません。

#### 影響を受ける部品の一覧:

注: 部品一覧には標準部品番号 (既製品) のみが記載されています。本 PCN の影響を受けるカスタム部品番号は、PCN メールで提供される顧客個別の付録、または PCN カスタマイズポータルに記載されています。

部品番号	認定試験用ピークル
BD681G	BD681G
MJE340G	BD681G
MJE3439G	BD681G
MJE344G	BD681G
2N6034G	BD681G
2N6035G	BD681G
2N6036G	BD681G
2N6038G	BD681G
2N6039G	BD681G
BD675AG	BD681G
BD675G	BD681G
BD676AG	BD681G
BD676G	BD681G
BD677AG	BD681G
BD677G	BD681G
BD678AG	BD681G
BD678G	BD681G

TEM001793 Rev. C 2/4 ページ

## 最終製品/プロセス変更通知

文書番号#: FPCN23727X 発行日:28 Dec 2020

BD679AG	BD681G
BD679G	BD681G
BD680AG	BD681G
BD680G	BD681G
MJE253G	BD681G
BD682G	BD681G
MJE700G	BD681G
MJE702G	BD681G
MJE703G	BD681G
MJE800G	BD681G
MJE802G	BD681G
MJE803G	BD681G
2N5190G	BD681G
2N5191G	BD681G
2N5192G	BD681G
2N5195G	BD681G
BD435G	BD681G
BD437G	BD681G
BD437TG	BD681G
BD439G	BD681G
BD441G	BD681G
BD442G	BD681G
MJE371G	BD681G
2N4918G	BD681G
2N4919G	BD681G
2N4920G	BD681G
2N4921G	BD681G
2N4922G	BD681G
2N4923G	BD681G
BD179G	BD681G
BD180G	BD681G
BD234G	BD681G
BD237G	BD681G
2N5657G	BD681G
TEM001793 Rev. C	3/4 ページ

## 最終製品 / プロセス変更通知

文書番号#: FPCN23727X 発行日:28 Dec 2020

BD159G	BD681G
MJE350G	BD681G
MJE270G	BD681G
BD135G	BD681G
BD135TG	BD681G
BD136G	BD681G
BD137G	BD681G
BD138G	BD681G
BD139G	BD681G
BD140G	BD681G
BD787G	BD681G
BD788G	BD681G
MJE170G	BD681G
MJE171G	BD681G
MJE172G	BD681G
MJE180G	BD681G
MJE181G	BD681G
MJE182G	BD681G
MJE200G	BD681G
MJE210G	BD681G
MJE243G	BD681G

TEM001793 Rev. C 4/4 ページ

## **Appendix A: Changed Products**

		_		_
Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
BD681G		BD681G	NA	
MJE340G		BD681G	NA	
MJE3439G		BD681G	NA	
MJE344G		BD681G	NA	
MJE802G		BD681G	NA	
MJE803G		BD681G	NA	
2N5190G		BD681G	NA	
2N5191G		BD681G	NA	
2N6034G		BD681G	NA	
2N6035G		BD681G	NA	
2N6036G		BD681G	NA	
2N6038G		BD681G	NA	
2N6039G		BD681G	NA	
BD675AG		BD681G	NA	
BD675G		BD681G	NA	
BD676AG		BD681G	NA	
BD676G		BD681G	NA	
BD677AG		BD681G	NA	
BD677G		BD681G	NA	
BD678AG		BD681G	NA	
BD678G		BD681G	NA	
BD679AG		BD681G	NA	
BD679G		BD681G	NA	
BD680AG		BD681G	NA	
BD680G		BD681G	NA	
MJE253G		BD681G	NA	
BD682G		BD681G	NA	
MJE700G		BD681G	NA	
MJE702G		BD681G	NA	
MJE703G		BD681G	NA	
MJE800G		BD681G	NA	
2N5192G		BD681G	NA	
2N5195G		BD681G	NA	
BD435G		BD681G	NA	
BD437G		BD681G	NA	
BD437TG		BD681G	NA	
BD439G		BD681G	NA	
BD441G		BD681G	NA	
BD442G		BD681G	NA	
2N4918G		BD681G	NA	
MJE371G		BD681G	NA	
2N4919G		BD681G	NA	

## **Appendix A: Changed Products**

				1
Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
2N4920G		BD681G	NA	
2N4922G		BD681G	NA	
2N4921G		BD681G	NA	
2N4923G		BD681G	NA	
BD179G		BD681G	NA	
BD237G		BD681G	NA	
BD180G		BD681G	NA	
2N5657G		BD681G	NA	
BD159G		BD681G	NA	
BD234G		BD681G	NA	
MJE350G		BD681G	NA	
BD135G		BD681G	NA	
MJE270G		BD681G	NA	
BD135TG		BD681G	NA	
BD136G		BD681G	NA	
BD137G		BD681G	NA	
BD138G		BD681G	NA	
BD139G		BD681G	NA	
BD787G		BD681G	NA	
BD140G		BD681G	NA	
MJE170G		BD681G	NA	
BD788G		BD681G	NA	
MJE172G		BD681G	NA	
MJE171G		BD681G	NA	
MJE180G		BD681G	NA	
MJE181G		BD681G	NA	
MJE182G		BD681G	NA	
MJE200G		BD681G	NA	
MJE210G		BD681G	NA	
MJE243G		BD681G	NA	