

**Final Product Change Notification**

202001004F01

**Issue Date:** 01-Apr-2020  
**Effective Date:** 14-Jul-2020

Here's your personalized quality information concerning products Digi-Key purchased from Nexperia. For detailed information we invite you to view this notification online



**Change Category**

- |   |  |  |   |   |
|---|--|--|---|---|
| <input checked="" type="checkbox"/> Wafer Fab Process   | <input type="checkbox"/> Assembly Process              | <input type="checkbox"/> Product Marking           | <input type="checkbox"/> Test Location  | <input type="checkbox"/> Design                         |
| <input checked="" type="checkbox"/> Wafer Fab Materials | <input checked="" type="checkbox"/> Assembly Materials | <input type="checkbox"/> Mechanical Specification  | <input type="checkbox"/> Test Process   | <input type="checkbox"/> Errata                         |
| <input type="checkbox"/> Wafer Fab Location             | <input type="checkbox"/> Assembly Location             | <input type="checkbox"/> Packing/Shipping/Labeling | <input type="checkbox"/> Test Equipment | <input type="checkbox"/> Electrical spec./Test coverage |

**Release of 8 inch wafer diameter for transistors**

**Details of this Change**

Release of 8 inch wafer diameter for transistors.

Old products: Production using 6 inch wafer diameter  
 Changed products: Production using 6 and 8 inch wafer diameter

In addition, for the BCM846BS wire bond material will be changed from gold (Au) to copper (Cu) and the 2nd source mold compound will be released, for the PMST3906 lead frame design version SOT323 R1 will be introduced.

Please refer to the Self Qualification Report for details and list of affected product types.  
 Production on 8 inch wafer diameter implies the use of the respective 8 inch wafer process technology.

**Why do we Implement this Change**

- Capacity expansion in wafer fab
- Next phase in 8 inch release after start with 8 inch implementation of bipolar transistors in 2011
- Continued alignment with world technology trends on state of the art production tools for discrete components
- Increase flexibility and volume ramp-up

**Identification of Affected Products**

The 8 inch products can be identified by a marker on the die surface.  
Changed products can be identified by date code after implementation.

## Product Availability

### Sample Information

Samples are available upon request  
Latest sample request date for PCN samples is 01-May-2020.

### Production

Planned first shipment 14-Jul-2020

## Impact

No impact to the products' functionality anticipated.

### Data Sheet Revision

No impact to existing datasheet

### Disposition of Old Products

Existing inventory will be shipped until depleted  
Supply using 6 inch wafer will be continued in parallel to 8 inch wafer production.

## Related Notifications

Notification	Issue Date	Effective Date	Title
201411005F0126	Jan-2015	10-May-2015	Change of bond wire from Au to Cu and release of 2nd source mold compound in SOT363
201602003F0122	May-2016	03-Sep-2016	Release of 8 inch wafer diameter for low VCEsat (BISS) transistors
201712005F0130	Apr-2018	29-Jul-2018	Change of lead frame version in SOT323 package
201811008F0110	Apr-2019	23-Jul-2019	Release of 8 inch wafer diameter for general-purpose bipolar transistors
201905004F0107	Jul-2019	20-Oct-2019	Release of 8 inch wafer diameter for transistors in SOT883 and SOT23

## Timing and Logistics

Your acknowledgement of this change, conform JEDEC J-STD-046, is expected till 01-May-2020. Lack of acknowledgement of the PCN constitutes acceptance of the change.

## Contact and Support

For all inquiries regarding the ePCN tool application or access issues, please contact Nexperia "Global Quality Support Team".

For all Quality Notification content inquiries, please contact your local Nexperia Sales Support team.

For specific questions on this notice or the products affected please contact our specialist directly:

**e-mail address** PCN-Bipolar.Discretes@nexperia.com

At Nexperia B.V. we are constantly striving to improve our product and processes to ensure they reach the highest possible Quality Standards.

## About Nexperia B.V.

We at Nexperia are the efficiency semiconductor company. We deliver over 90 billion products a year and as such service thousands of global customers, both directly and through our extensive network of channel partners. We are at the heart of billions of electronic devices in the Automotive, Mobile, Industrial, Consumer, Computing, and Communication Infrastructure segments.

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Nexperia B.V.  
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Changed Orderable Part#	Changed Part 12NC	Changed Part Number	Changed Part Description	Package Outline	Package Name	Status	Product Line
PBSS4160T,215	934057667215	PBSS4160T	BISS	SOT23	TO-236AB	RFS	Bipolar Discretes
BCM857BS,135	934058729135	BCM857BS	Matched pair	SOT363	SC-88	RFS	Bipolar Discretes
PBSS5160T,215	934057668215	PBSS5160T	BISS	SOT23	TO-236AB	RFS	Bipolar Discretes
PMST3906,115	934026930115	PMST3906	Switching transistor	SOT323	SC-70	RFS	Bipolar Discretes
BCM847BS,115	934058507115	BCM847BS	Matched pair	SOT363	SC-88	RFS	Bipolar Discretes
BCM846BSX	934069545115	BCM846BS	Matched pair	SOT363	SC-88	RFS	Bipolar Discretes
PMBT3946YPN,125	934061453125	PMBT3946YPN	GENERAL PURPOSE TRANSISTOR	SOT363	SC-88	RFS	Bipolar Discretes
PBSS5160U,115	934058123115	PBSS5160U	BISS	SOT323	SC-70	RFS	Bipolar Discretes
BCM856BS,115	934062056115	BCM856BS	COMPLEX DISCRETE	SOT363	SC-88	RFS	Bipolar Discretes
BCM857BS,115	934058729115	BCM857BS	Matched pair	SOT363	SC-88	RFS	Bipolar Discretes
BCM847BS,135	934058507135	BCM847BS	Matched pair	SOT363	SC-88	RFS	Bipolar Discretes
PBSS5540Z,115	934055496115	PBSS5540Z	BISS	SOT223	SC-73	RFS	Bipolar Discretes
PBSS5540ZF	934055496135	PBSS5540Z	BISS	SOT223	SC-73	RFS	Bipolar Discretes
PBSS4540Z,115	934055495115	PBSS4540Z	BISS	SOT223	SC-73	RFS	Bipolar Discretes
PMBT3946YPN,115	934061453115	PMBT3946YPN	GENERAL PURPOSE TRANSISTOR	SOT363	SC-88	RFS	Bipolar Discretes