

Product / Process Change Notification



N° 2020-006-A

Dear Customer,

Please find attached our INFINEON Technologies PCN:

Capacity extension for dedicated OptiMOS™ products in PG-TDSON package at Infineon Technologies Wuxi Co., Ltd., China (4th wave)

Important information for your attention:

- Please respond to this PCN by indicating your decision on the approval form, sign it and return to your sales partner before **25. January 2021**.
- Infineon aligns with the widely-recognized JEDEC STANDARD “**JESD46**“, which stipulates:
“**Lack of acknowledgement 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.

Infineon Technologies AG
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Chairman of the Supervisory Board: Dr. Wolfgang Eder
Management Board: Dr. Reinhard Ploss (CEO), Dr. Helmut Gassel, Jochen Hanebeck, Dr. Sven Schneider
Registered Office: Neubiberg
Commercial Register: München HRB 126492

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► **Products affected:** Please refer to attached affected product list 1_cip20006_a

► **Detailed Change Information:**

Subject: Capacity extension at Infineon Technologies Wuxi Co., Ltd., China (IFX Wuxi) for PG-TDSON package

Reason: Extension of high volume assembly manufacturing capability to cover increasing customer demand and support short term upside demand in a more efficient way.

Description:	Assembly and Final Test location	
	<u>Old</u>	<u>New</u>
	■ Infineon Technologies Malaysia Sdn. Bhd., Melaka ■ Subcontractor ASE (Weihai) Inc., China ■ Subcontractor Tongfu Microelectronics Co. Ltd., China	■ Infineon Technologies Malaysia Sdn. Bhd., Melaka ■ Subcontractor ASE (Weihai) Inc., China ■ Subcontractor Tongfu Microelectronics Co. Ltd., China ■ Infineon Technologies Wuxi Co., Ltd., China

► **Product Identification:** Internal traceability via Baunumber, Lotnumber, date code and marking on device
External traceability via marking on device

► **Impact of Change:**

NO change on electrical, thermal parameters and reliability as proven via product qualification and characterization.

NO change of existing datasheet parameters.

NO change in quality and reliability. Processes are optimized to meet product performance according to already applied Infineon specification.

NO change in package outline dimensions.

► **Attachments:**

Affected product list: 1_cip20006_a
Qualification report: 2_cip20006_a

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► Time Schedule:

■ Final qualification report:	available
■ First samples available:	on request
■ Intended start of delivery:	14-March-2021 or earlier based on customer approval

If you have any questions, please do not hesitate to contact your local Sales office.



Sales name	SP number	OPN	Package
BSC004NE2LS5	SP004950304	BSC004NE2LS5ATMA1	PG-TDSON-8
BSC005N03LS5	SP004819078	BSC005N03LS5ATMA1	PG-TDSON-8
BSC005N03LS5I	SP004819084	BSC005N03LS5IATMA1	PG-TDSON-8
BSC007N04LS6	SP001629650	BSC007N04LS6ATMA1	PG-TDSON-8
BSC007N04LS6 E8218	SP001709838	BSC007N04LS6E8218ATMA1	PG-TDSON-8
BSC010N04LS	SP000928282	BSC010N04LSATMA1	PG-TDSON-8
BSC010N04LS E8218	SP001643086	BSC010N04LSE8218ATMA1	PG-TDSON-8
BSC010N04LS E8231	SP002905766	BSC010N04LSE8231ATMA1	PG-TDSON-8
BSC010N04LS6	SP001687044	BSC010N04LS6ATMA1	PG-TDSON-8
BSC010N04LSI	SP000953210	BSC010N04LSIATMA1	PG-TDSON-8
BSC010N04LST	SP001657068	BSC010N04LSTATMA1	PG-TDSON-8
BSC011N03LST	SP001657064	BSC011N03LSTATMA1	PG-TDSON-8
BSC011N03LST E8218	SP003549456	BSC011N03LSTE8218ATMA1	PG-TDSON-8
BSC014N06NS	SP000924886	BSC014N06NSATMA1	PG-TDSON-8
BSC014N06NS E8218	SP005406111	BSC014N06NSE8218ATMA1	PG-TDSON-8
BSC014N06NS E8230	SP002683690	BSC014N06NSE8230ATMA1	PG-TDSON-8
BSC014N06NST	SP001657072	BSC014N06NSTATMA1	PG-TDSON-8
BSC015NE2LS5I	SP001288138	BSC015NE2LS5IATMA1	PG-TDSON-8
BSC016N04LS G	SP000394801	BSC016N04LSGATMA1	PG-TDSON-8
BSC016N06NS	SP000924882	BSC016N06NSATMA1	PG-TDSON-8
BSC016N06NS E8230	SP002683698	BSC016N06NSE8230ATMA1	PG-TDSON-8
BSC016N06NST	SP001657074	BSC016N06NSTATMA1	PG-TDSON-8
BSC019N06NS	SP001407774	BSC019N06NSATMA1	PG-TDSON-8
BSC025N08LS5	SP001385618	BSC025N08LS5ATMA1	PG-TDSON-8
BSC026N08NS5	SP001154276	BSC026N08NS5ATMA1	PG-TDSON-8
BSC0302LS	SP004486450	BSC0302LSATMA1	PG-TDSON-8
BSC0303LS	SP004486474	BSC0303LSATMA1	PG-TDSON-8
BSC030N08NS5	SP001077098	BSC030N08NS5ATMA1	PG-TDSON-8
BSC034N10LS5	SP001385620	BSC034N10LS5ATMA1	PG-TDSON-8
BSC035N10NS5	SP001229628	BSC035N10NS5ATMA1	PG-TDSON-8
BSC036NE7NS3 G	SP000907920	BSC036NE7NS3GATMA1	PG-TDSON-8
BSC037N08NS5	SP001294988	BSC037N08NS5ATMA1	PG-TDSON-8
BSC037N08NS5T	SP004475134	BSC037N08NS5TATMA1	PG-TDSON-8
BSC0402NS	SP005399476	BSC0402NSATMA1	PG-TDSON-8
BSC0403NS	SP005399481	BSC0403NSATMA1	PG-TDSON-8
BSC040N08NS5	SP001132452	BSC040N08NS5ATMA1	PG-TDSON-8
BSC040N10NS5	SP001295030	BSC040N10NS5ATMA1	PG-TDSON-8
BSC040N10NS5 E8203	SP001315874	BSC040N10NS5E8203ATMA1	PG-TDSON-8
BSC050N10NS5	SP001861032	BSC050N10NS5ATMA1	PG-TDSON-8
BSC052N08NS5	SP001232632	BSC052N08NS5ATMA1	PG-TDSON-8
BSC0604LS	SP001648312	BSC0604LSATMA1	PG-TDSON-8
BSC061N08NS5	SP001232634	BSC061N08NS5ATMA1	PG-TDSON-8
BSC072N08NS5	SP001232628	BSC072N08NS5ATMA1	PG-TDSON-8
BSC0802LS	SP001614074	BSC0802LSATMA1	PG-TDSON-8
BSC080N12LS G	SP002256844	BSC080N12LSGATMA1	PG-TDSON-8

Qualification Test Report



PCN N° 2020-006-A

30.09.2020

Title Capacity extension for dedicated OptiMOS™ products in PG-TDSON package at Infineon Technologies Wuxi Co., Ltd., China (4th wave)

Reason for choosing the following test vehicles:

BSC036NE7NS3 G Biggest chip in of OptiMOS™ 3 75V till 150V Normal Level product in PG-TDSON-8 package assembled at IFX Wuxi, China
 BSC600N25NS3 G Biggest chip in of OptiMOS™ 3 200V till 300V Normal Level product in PG-TDSON-8 package assembled at IFX Wuxi, China
 BSC016N04LS G Medium chip in of OptiMOS™ 5 40V till 60V Logic Level product in PG-TDSON-8 package assembled at IFX Wuxi, China
 BSC005N03LS5 Biggest chip in of OptiMOS™ 5 25V till 30V Normal Level product in PG-TDSON-8 package assembled at IFX Wuxi, China
 BSC010N04LS Medium chip in of OptiMOS™ 5 40V till 60V Logic Level product in PG-TDSON-8 package assembled at IFX Wuxi, China
 BSC014N06NST Biggest chip in of OptiMOS™ 5 40 till 60V Normal Level product in PG-TDSON-8 package assembled at IFX Wuxi, China
 BSC035N10NS5 Biggest chip in of OptiMOS™ 5 80 till 100V Normal Level product in PG-TDSON-8 package assembled at IFX Wuxi, China
 BSC040N08NS5 Medium chip in of OptiMOS™ 5 80 till 100V Normal Level product in PG-TDSON-8 package assembled at IFX Wuxi, China
 BSC093N15NS5 Biggest chip in of OptiMOS™ 5 150V Normal Level product in PG-TDSON-8 package assembled at IFX Wuxi, China
 BSC007N04LS6 Biggest chip in of OptiMOS™ 6 40V Normal Level product in PG-TDSON-8 package assembled at IFX Wuxi, China

Scope of qualification:

Qualification and release of dedicated OptiMOS™ Products assembled at Infineon Wuxi, China

Assessment of Q-Results:

Pass qualification acc. JEDEC. This is based on positive results from all reliability stress tests performed.

Stress test	Abbreviation	Test conditions	Readout	BSC036NE7NS3 G	BSC600N25NS3 G	BSC016N04LS G	BSC005N03LS5	BSC010N04LS	BSC014N06NST	BSC035N10NS5	BSC040N08NS5	BSC093N15NS5	BSC007N04LS6
				fails / stressed	fails / stressed	fails / stressed	fails / stressed	fails / stressed	fails / stressed	fails / stressed	fails / stressed	fails / stressed	fails / stressed
MSL Preconditioning JESD22-A113	PC	MSL 1	0h	0/330	0/385	0/253	0/253	0/407	0/385	0/484	0/330	0/484	0 / 407
Temperature Cycling JESD22-A104	TC	with preconditioning	1000 cyc	0 / 77	0 / 77	0 / 77	0 / 77	0 / 77	0 / 77	0 / 77	0 / 77	0 / 77	0 / 77
Unbiased Temperature/Humidity JESD22-A118	UHAST	with preconditioning Ta = 130 °C, RH = 85%	96 h	0 / 77	0 / 77	0 / 77	0 / 77	0 / 77	0 / 77	0 / 77	0 / 77	0 / 77	0 / 77
High Humidity High Temp. Reverse Bias JESD22-A101	H3TRB	with preconditioning T = 85 °C RH = 85% VDS = 80% VDS max (max 100V)	1000 h	0/77	0/77	Refer to BSC014N06NST	0/77	Refer to BSC005N03NS5	0/77	0/77	Refer to BSC035N10NS5	0 / 77	Refer to BSC010N04LS6
High Temperature Reverse Bias JESD22-A108	HTRB	with preconditioning Tj = Tj max (150 °C or 175 °C) VDS = 100% VDS max	1000 h	Refer to BSC600N25NS3 G	0/77	Refer to BSC010N04LS	Refer to BSC010N04LS	0/77	0/77	0/77	Refer to BSC035N10NS5	0 / 77	0 / 77
High Temperature Gate stress JESD22-A108	HTGS	with preconditioning Ta = Ta max (150 °C or 175 °C) Normal Level: VGS = ±20 V Logic Level: VGS = ±16 V	1000 h	0 / 77	Refer to BSC600N25NS3 G	0/77	Refer to BSC010N04LS	0/77	0/77	0/77	0/77	0 / 77	0 / 77
Intermittent Operational Life Test MIL-STD 750/Meth. 1037	IOL	with preconditioning Delta T = 100 K	15000 cyc	Refer to BSC600N25NS3 G	0 / 77	Refer to BSC010N04LS	Refer to BSC010N04LS	0/77	-	0/77	0/77	0 / 77	0 / 77