



Title of Change:	Update to FPCN22687X –Announcing that ASE Kaohsiung, Taiwan (ASEKH) is the correct Backgrind location for this change.	
Proposed first ship date:	26 October 2019	
Contact information:	Contact your local ON Semiconductor Sales Office or < PCN.Support@onsemi.com >	
Samples:	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 < tomas.vajter@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 < PCN.Support@onsemi.com >	
Change Part Identification:	Affected products will be identified with date code	
Change Category:	<input type="checkbox"/> Wafer Fab Change <input checked="" type="checkbox"/> Assembly Change <input checked="" type="checkbox"/> Test Change <input type="checkbox"/> Other _____	
Change Sub-Category(s):	<input checked="" type="checkbox"/> Manufacturing Site Addition <input type="checkbox"/> Material Change <input type="checkbox"/> Datasheet/Product Doc change <input type="checkbox"/> Manufacturing Site Transfer <input type="checkbox"/> Product specific change <input type="checkbox"/> Shipping/Packaging/Marking <input type="checkbox"/> Manufacturing Process Change <input type="checkbox"/> Other: _____	
Sites Affected:	ON Semiconductor Sites: ON Shenzhen, China	External Foundry/Subcon Sites: ASE Kaohsiung
Description and Purpose:		
<p>FPCN22687X previously announced Backgrind location in ON Semiconductor Shenzhen, China (ONSC).</p> <p>This Update Notification is announcing that ASE Kaohsiung, Taiwan (ASEKH) is the correct Backgrind location for this change. Qualification for Backgrind operation has been completed on this location.</p> <p>Before Change Capacity expansion for WLCSP packages. Bump process will be located in ASE Kaohsiung, Taiwan (ASEKH) Probe, Backgrind and Marking processes will be located in ON Semiconductor Shenzhen, China (ONSC)</p> <p>After Change Capacity expansion for WLCSP packages. Bump process and Backgrind will be located in ASE Kaohsiung, Taiwan (ASEKH) Probe and Marking processes will be located in ON Semiconductor Shenzhen, China (ONSC)</p>		



Reliability Data Summary:

QV DEVICE NAME: NCP161AFCT180T2G

RMS : 56093

PACKAGE : WLCSP-4 567JZ

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs	0/252
ELFR	JESD22-A108	Ta=125°C, 100 % max rated Vcc	48 hrs	0/2880
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/251
TC	JESD22-A104	Ta= -40°C to +125°C	500 cyc	0/252
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/252
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/252
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	3x reflow	0/756
ESD	JESD22-A114	Human Body Model		Passed 2kV
ESD	JESD22-C101	Charge Device Model		Passed 1kV
LU	AEC-Q100-004	Dynamic Latch-up		LU+>100mA LU->100mA
PD	JESD22-B100	Per case outline		Passed
SBS	AEC-Q100-010	Solder Ball Shear		Passed

Electrical Characteristic 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 [PCN Customized Portal](#).

Part Number	Qualification Vehicle
NCP110AFCT060T2G	NCP161AFCT180T2G
NCP110AFCT080T2G	NCP161AFCT180T2G
NCP110AFCT085T2G	NCP161AFCT180T2G
NCP110AFCT100T2G	NCP161AFCT180T2G
NCP110AFCT105T2G	NCP161AFCT180T2G
NCP110AFCT110T2G	NCP161AFCT180T2G
NCP110AFCT120T2G	NCP161AFCT180T2G
NCP110AFCT180T2G	NCP161AFCT180T2G
NCP110AFCT280T2G	NCP161AFCT180T2G
NCP148AFCT180T2G	NCP161AFCT180T2G
NCP148AFCT250T2G	NCP161AFCT180T2G
NCP148AFCT260T2G	NCP161AFCT180T2G
NCP148AFCT270T2G	NCP161AFCT180T2G



NCP148AFCT280T2G	NCP161AFCT180T2G
NCP148AFCT285T2G	NCP161AFCT180T2G
NCP160AFCT180T2G	NCP161AFCT180T2G
NCP160AFCT250T2G	NCP161AFCT180T2G
NCP160AFCT280T2G	NCP161AFCT180T2G
NCP160AFCT285T2G	NCP161AFCT180T2G
NCP160AFCT300T2G	NCP161AFCT180T2G
NCP160AFCT330T2G	NCP161AFCT180T2G
NCP160AFCT350T2G	NCP161AFCT180T2G
NCP160AFCT450T2G	NCP161AFCT180T2G
NCP160AFCT500T2G	NCP161AFCT180T2G
NCP160AFCT514T2G	NCP161AFCT180T2G
NCP160AFCTC180T2G	NCP161AFCT180T2G
NCP160AFCTC330T2G	NCP161AFCT180T2G
NCP160BFCT180T2G	NCP161AFCT180T2G
NCP160BFCT210T2G	NCP161AFCT180T2G
NCP160BFCT250T2G	NCP161AFCT180T2G
NCP160BFCT280T2G	NCP161AFCT180T2G
NCP160BFCT285T2G	NCP161AFCT180T2G
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NCP160BFCT330T2G	NCP161AFCT180T2G
NCP160BFCT350T2G	NCP161AFCT180T2G
NCP160BFCT450T2G	NCP161AFCT180T2G
NCP160BFCT500T2G	NCP161AFCT180T2G
NCP160BFCT514T2G	NCP161AFCT180T2G
NCP161AFCT180T2G	NCP161AFCT180T2G
NCP161AFCT185T2G	NCP161AFCT180T2G
NCP161AFCT250T2G	NCP161AFCT180T2G
NCP161AFCT280T2G	NCP161AFCT180T2G
NCP161AFCT285T2G	NCP161AFCT180T2G
NCP161AFCT290T2G	NCP161AFCT180T2G
NCP161AFCT300T2G	NCP161AFCT180T2G
NCP161AFCT310T2G	NCP161AFCT180T2G
NCP161AFCT330T2G	NCP161AFCT180T2G
NCP161AFCT350T2G	NCP161AFCT180T2G
NCP161AFCT450T2G	NCP161AFCT180T2G



NCP161AFCT500T2G	NCP161AFCT180T2G
NCP161AFCT514T2G	NCP161AFCT180T2G
NCP161AFCTC280T2G	NCP161AFCT180T2G
NCP161AFCTC350T2G	NCP161AFCT180T2G
NCP161BFCT180T2G	NCP161AFCT180T2G
NCP161BFCT185T2G	NCP161AFCT180T2G
NCP161BFCT250T2G	NCP161AFCT180T2G
NCP161BFCT280T2G	NCP161AFCT180T2G
NCP161BFCT285T2G	NCP161AFCT180T2G
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NCP167AFCT285T2G	NCP161AFCT180T2G
NCP167AFCT295T2G	NCP161AFCT180T2G
NCP167AFCT330T2G	NCP161AFCT180T2G
NCP167AFCT350T2G	NCP161AFCT180T2G
NCP167AFCTC350T2G	NCP161AFCT180T2G
NCP167BFCT330T2G	NCP161AFCT180T2G

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# : FPCN22687X1

発行日 : 24 September 2019

変更件名:	FPCN22687X の更新 – この変更における正しいバックグランド拠点は台湾の ASE 高雄(ASEKH)であることをお知らせします。	
初回出荷予定日:	26 October 2019	
連絡先情報:	現地のオン・セミコンダクター営業所または <PCN.Support@onsemi.com>にお問い合わせください。	
サンプル:	現地のオン・セミコンダクター営業所または <PCN.Samples@onsemi.com> 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。	
追加の信頼性データ:	お客さまの地域のオン・セミコンダクター営業所または <tomas.vajter@onsemi.com> にお問い合わせください。	
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。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、この変更が承諾されたものとみなします。お問い合わせは、<PCN.Support@onsemi.com> 宛てにお願いします。	
変更部品の識別:	影響を受ける製品は日付コードで識別します	
変更カテゴリ:	<input type="checkbox"/> ウェハファブの変更 <input checked="" type="checkbox"/> アセンブリの変更 <input checked="" type="checkbox"/> 試験の変更 <input type="checkbox"/> その他 _____	
変更サブカテゴリ:	<input checked="" type="checkbox"/> 製造拠点の追加 <input type="checkbox"/> 材料の変更 <input type="checkbox"/> データシート/製品資料の変更 <input type="checkbox"/> 製造拠点の移転 <input type="checkbox"/> 製品仕様の変更 <input type="checkbox"/> 出荷/パッケージング/表記 <input type="checkbox"/> 製造プロセスの変更 <input type="checkbox"/> その他: _____	
影響を受ける拠点:	オン・セミコンダクター 拠点: ON Shenzhen, China	外部製造工場 / 下請業者 拠点: ASE Kaohsiung
説明および目的:	<p>以前 FPCN22687X でバックグランド拠点が中国のオン・セミコンダクター 深セン(ONSC)になるとお知らせしました。</p> <p>この更新通知では、この変更における正しいバックグランド拠点は台湾の ASE 高雄(ASEKH)であることをお知らせします。バックグランドオペレーションの認定はこの拠点で行われました。</p> <p>変更前 WLCSP パッケージのための生産能力の拡大。 バンブプロセスは、台湾の ASE 高雄 (ASEKH) に配置されます プローブ、バックグランド、およびマーキングプロセスは、中国のオン・セミコンダクター深セン (ONSC) に配置されます</p> <p>変更後 WLCSP パッケージのための生産能力の拡大。 バンブプロセスとバックグランドは、台湾の高雄 (ASEKH) ASE に配置されます。 プローブとマーキングのプロセスは、中国のオン・セミコンダクター深セン (ONSC) に配置されます。</p>	



信頼性データの要約:

デバイス名: NCP161AFCT180T2G

RMS : 56093

パッケージ: WLCSP-4 567JZ

テスト	仕様	条件	間隔	結果
HTOL	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs	0/252
ELFR	JESD22-A108	Ta=125°C, 100 % max rated Vcc	48 hrs	0/2880
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/251
TC	JESD22-A104	Ta= -40°C to +125°C	500 cyc	0/252
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/252
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/252
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	3x reflow	0/756
ESD	JESD22-A114	Human Body Model		Passed 2kV
ESD	JESD22-C101	Charge Device Model		Passed 1kV
LU	AEC-Q100-004	Dynamic Latch-up		LU+>100mA LU->100mA
PD	JESD22-B100	Per case outline		Passed
SBS	AEC-Q100-010	Solder Ball Shear		Passed

電氣的特性の要約: 電氣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
NCP110AFCT060T2G	NCP161AFCT180T2G
NCP110AFCT080T2G	NCP161AFCT180T2G
NCP110AFCT085T2G	NCP161AFCT180T2G
NCP110AFCT100T2G	NCP161AFCT180T2G
NCP110AFCT105T2G	NCP161AFCT180T2G
NCP110AFCT110T2G	NCP161AFCT180T2G
NCP110AFCT120T2G	NCP161AFCT180T2G
NCP110AFCT180T2G	NCP161AFCT180T2G
NCP110AFCT280T2G	NCP161AFCT180T2G
NCP148AFCT180T2G	NCP161AFCT180T2G
NCP148AFCT250T2G	NCP161AFCT180T2G
NCP148AFCT260T2G	NCP161AFCT180T2G



NCP148AFCT270T2G	NCP161AFCT180T2G
NCP148AFCT280T2G	NCP161AFCT180T2G
NCP148AFCT285T2G	NCP161AFCT180T2G
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NCP160AFCT250T2G	NCP161AFCT180T2G
NCP160AFCT280T2G	NCP161AFCT180T2G
NCP160AFCT285T2G	NCP161AFCT180T2G
NCP160AFCT300T2G	NCP161AFCT180T2G
NCP160AFCT330T2G	NCP161AFCT180T2G
NCP160AFCT350T2G	NCP161AFCT180T2G
NCP160AFCT450T2G	NCP161AFCT180T2G
NCP160AFCT500T2G	NCP161AFCT180T2G
NCP160AFCT514T2G	NCP161AFCT180T2G
NCP160AFCTC180T2G	NCP161AFCT180T2G
NCP160AFCTC330T2G	NCP161AFCT180T2G
NCP160BFCT180T2G	NCP161AFCT180T2G
NCP160BFCT210T2G	NCP161AFCT180T2G
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NCP160BFCT280T2G	NCP161AFCT180T2G
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NCP161AFCT330T2G	NCP161AFCT180T2G
NCP161AFCT350T2G	NCP161AFCT180T2G
NCP161AFCT450T2G	NCP161AFCT180T2G
NCP161AFCT500T2G	NCP161AFCT180T2G



最終製品 / プロセス変更通知

文書番号# : FPCN22687X1

発行日 : 24 September 2019

NCP161AFCT514T2G	NCP161AFCT180T2G
NCP161AFCTC280T2G	NCP161AFCT180T2G
NCP161AFCTC350T2G	NCP161AFCT180T2G
NCP161BFCT180T2G	NCP161AFCT180T2G
NCP161BFCT185T2G	NCP161AFCT180T2G
NCP161BFCT250T2G	NCP161AFCT180T2G
NCP161BFCT280T2G	NCP161AFCT180T2G
NCP161BFCT285T2G	NCP161AFCT180T2G
NCP161BFCT300T2G	NCP161AFCT180T2G
NCP161BFCT330T2G	NCP161AFCT180T2G
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NCP161BFCT450T2G	NCP161AFCT180T2G
NCP161BFCT500T2G	NCP161AFCT180T2G
NCP161BFCT514T2G	NCP161AFCT180T2G
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NCP163BFCT2925T2G	NCP161AFCT180T2G
NCP167AFCT180T2G	NCP161AFCT180T2G
NCP167AFCT285T2G	NCP161AFCT180T2G
NCP167AFCT295T2G	NCP161AFCT180T2G
NCP167AFCT330T2G	NCP161AFCT180T2G
NCP167AFCT350T2G	NCP161AFCT180T2G
NCP167AFCTC350T2G	NCP161AFCT180T2G
NCP167BFCT330T2G	NCP161AFCT180T2G

Appendix A: Changed Products

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Product	Customer Part Number	Qualification Vehicle
NCP110AFCT060T2G		NCP161AFCT180T2G
NCP110AFCT105T2G		NCP161AFCT180T2G
NCP110AFCT110T2G		NCP161AFCT180T2G
NCP110AFCT120T2G		NCP161AFCT180T2G
NCP110AFCT180T2G		NCP161AFCT180T2G
NCP110AFCT280T2G		NCP161AFCT180T2G
NCP148AFCT180T2G		NCP161AFCT180T2G
NCP148AFCT250T2G		NCP161AFCT180T2G
NCP148AFCT260T2G		NCP161AFCT180T2G
NCP148AFCT270T2G		NCP161AFCT180T2G
NCP148AFCT280T2G		NCP161AFCT180T2G
NCP148AFCT285T2G		NCP161AFCT180T2G
NCP160AFCT180T2G	NCP160AFCT180T2G	NCP161AFCT180T2G
NCP160AFCT250T2G		NCP161AFCT180T2G
NCP160AFCT280T2G		NCP161AFCT180T2G
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NCP160AFCT330T2G	NCP160AFCT330T2G	NCP161AFCT180T2G
NCP160AFCT350T2G		NCP161AFCT180T2G
NCP160AFCT450T2G		NCP161AFCT180T2G
NCP160AFCT500T2G		NCP161AFCT180T2G
NCP160AFCT514T2G		NCP161AFCT180T2G
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NCP160BFCT280T2G		NCP161AFCT180T2G
NCP160BFCT285T2G		NCP161AFCT180T2G
NCP160BFCT300T2G	NCP160BFCT300T2G	NCP161AFCT180T2G
NCP160BFCT330T2G		NCP161AFCT180T2G
NCP160BFCT350T2G		NCP161AFCT180T2G
NCP160BFCT450T2G		NCP161AFCT180T2G
NCP160BFCT500T2G		NCP161AFCT180T2G
NCP160BFCT514T2G	NCP160BFCT514T2G	NCP161AFCT180T2G
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NCP161AFCT250T2G		NCP161AFCT180T2G
NCP161AFCT280T2G		NCP161AFCT180T2G
NCP161AFCT285T2G		NCP161AFCT180T2G
NCP161AFCT290T2G		NCP161AFCT180T2G
NCP161AFCT300T2G		NCP161AFCT180T2G
NCP161AFCT310T2G		NCP161AFCT180T2G
NCP161AFCT330T2G		NCP161AFCT180T2G
NCP161AFCT350T2G	NCP161AFCT350T2G	NCP161AFCT180T2G
NCP161AFCT450T2G		NCP161AFCT180T2G
NCP161AFCT500T2G		NCP161AFCT180T2G
NCP161AFCT514T2G		NCP161AFCT180T2G
NCP161BFCT180T2G		NCP161AFCT180T2G
NCP161BFCT185T2G	NCP161BFCT185T2G	NCP161AFCT180T2G
NCP161BFCT250T2G		NCP161AFCT180T2G
NCP161BFCT280T2G		NCP161AFCT180T2G
NCP161BFCT285T2G		NCP161AFCT180T2G
NCP161BFCT300T2G		NCP161AFCT180T2G
NCP161BFCT330T2G	NCP161BFCT330T2G	NCP161AFCT180T2G
NCP161BFCT350T2G		NCP161AFCT180T2G
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NCP161BFCT500T2G		NCP161AFCT180T2G
NCP161BFCT514T2G		NCP161AFCT180T2G
NCP163AFCT120T2G	NCP163AFCT120T2G	NCP161AFCT180T2G



NCP163AFCT180T2G		NCP161AFCT180T2G
NCP163AFCT250T2G		NCP161AFCT180T2G
NCP163AFCT260T2G		NCP161AFCT180T2G
NCP163AFCT270T2G		NCP161AFCT180T2G
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NCP163AFCT300T2G		NCP161AFCT180T2G
NCP163AFCT330T2G		NCP161AFCT180T2G
NCP163BFCT180T2G		NCP161AFCT180T2G
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NCP167AFCT180T2G		NCP161AFCT180T2G
NCP167AFCT285T2G		NCP161AFCT180T2G
NCP167AFCT330T2G		NCP161AFCT180T2G
NCP167BFCT330T2G		NCP161AFCT180T2G