



Initial Product/Process Change Notification

Document #: IPCN23934XA

Issue Date: 27 May 2021

Title of Change:	Addition of Asahi Kasei's BL401 polyimide material for ASEKH (Advanced Semiconductor Engineering Inc., Kaohsiung) WLCSP assembly	
Proposed First Ship date:	04 Oct 2021 or earlier if approved by customer	
Contact Information:	Contact your local ON Semiconductor Sales Office or Marek.Haluska@onsemi.com	
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.	
Type of Notification:	This is an Initial Product/Process Change Notification (IPCN) sent to customers. An IPCN is an advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan. The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN). This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 90 days prior to implementation of the change. In case of questions, contact PCN.Support@onsemi.com	
Marking of Parts/ Traceability of Change:	Affected products will be traceable by date code	
Change Category:	Assembly Change	
Change Sub-Category(s):	Material Change	
Sites Affected:		
ON Semiconductor Sites	External Foundry/Subcon Sites	
None	ASEKH, Taiwan (Kaohsiung)	
Description and Purpose:		
<p>ON Semiconductor is announcing the addition of an alternate polyimide material (re-passivation layer) from Asahi Kasei's BL401 for ASEKH assembly site.</p> <p>This is an alternate polyimide material only; there are no changes to the WLCSP package structure or polyimide thicknesses because of this change. There are no changes to electrical parameters or part marking due to this alternate material.</p> <p>The polyimide addition will apply to all devices shown in the affected part list (below), as well as future products released in this location.</p> <p>Upon effectivity of Final PCN either passivation material may be utilized during manufacturing. Full traceability will be maintained, and there will be no mixing of materials within a lot.</p>		
	Polyimide Layer Before Change	Polyimide Layer After Change
PI layer name	HD4000E	HD4000E or BL401
Supplier name	HD Microsystems	HD Microsystems or Asahi Kasei

**Qualification Plan:**QV DEVICE NAME: **SCY99247CFCS120T2G**PACKAGE: **WLCSP-6 567XZ**

Test	Specification	Condition	Interval
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	3x reflow
TC	JESD22-A104	Ta= -40°C to +125°C	850 cyc
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
ED	ON Data Sheet	Test @ Cold & Room & Hot	Cpk ≥ 1.67
PD	JESD22-B100	Per case outline	Cpk > 1.67
SBS	AEC-Q100-010	Solder Ball Shear	Cpk > 1.67

QV DEVICE NAME: **SCY99224AFCT115T2G**PACKAGE: **WLCSP-4 567VS**

Test	Specification	Condition	Interval
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	3x reflow
TC	JESD22-A104	Ta= -40°C to +125°C	850 cyc
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
ED	ON Data Sheet	Test @ Cold & Room & Hot	Cpk ≥ 1.67
PD	JESD22-B100	Per case outline	Cpk > 1.67
SBS	AEC-Q100-010	Solder Ball Shear	Cpk > 1.67

Estimated date for qualification completion: 31 Aug 2021

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	SCY99224AFCT115T2G
NCP110AFCT080T2G	SCY99224AFCT115T2G
NCP110AFCT085T2G	SCY99224AFCT115T2G
NCP110AFCT100T2G	SCY99224AFCT115T2G
NCP110AFCT105T2G	SCY99224AFCT115T2G
NCP110AFCT110T2G	SCY99224AFCT115T2G
NCP110AFCT120T2G	SCY99224AFCT115T2G
NCP110AFCT180T2G	SCY99224AFCT115T2G
NCP110AFCT280T2G	SCY99224AFCT115T2G
NCP148AFCT180T2G	SCY99224AFCT115T2G
NCP148AFCT250T2G	SCY99224AFCT115T2G



NCP148AFCT260T2G	SCY99224AFCT115T2G
NCP148AFCT270T2G	SCY99224AFCT115T2G
NCP148AFCT280T2G	SCY99224AFCT115T2G
NCP148AFCT285T2G	SCY99224AFCT115T2G
NCP160AFCT180T2G	SCY99224AFCT115T2G
NCP160AFCT285T2G	SCY99224AFCT115T2G
NCP160AFCT300T2G	SCY99224AFCT115T2G
NCP160AFCT330T2G	SCY99224AFCT115T2G
NCP160AFCT350T2G	SCY99224AFCT115T2G
NCP160AFCTC330T2G	SCY99224AFCT115T2G
NCP167BFCT330T2G	SCY99224AFCT115T2G
NCP167AFCTC350T2G	SCY99224AFCT115T2G
NCP167AFCT350T2G	SCY99224AFCT115T2G
NCP167AFCT330T2G	SCY99224AFCT115T2G
NCP167AFCT295T2G	SCY99224AFCT115T2G
NCP167AFCT285T2G	SCY99224AFCT115T2G
NCP167AFCT180T2G	SCY99224AFCT115T2G
NCP163AFCT330T2G	SCY99224AFCT115T2G
NCP163AFCT2925T2G	SCY99224AFCT115T2G
NCP163AFCT290T2G	SCY99224AFCT115T2G
NCP163AFCT285T2G	SCY99224AFCT115T2G
NCP163AFCT280T2G	SCY99224AFCT115T2G
NCP163AFCT180T2G	SCY99224AFCT115T2G
NCP161BFCT514T2G	SCY99224AFCT115T2G
NCP161BFCT280T2G	SCY99224AFCT115T2G
NCP161BFCT180T2G	SCY99224AFCT115T2G
NCP161AFCTC350T2G	SCY99224AFCT115T2G
NCP161AFCTC280T2G	SCY99224AFCT115T2G
NCP161AFCT350T2G	SCY99224AFCT115T2G
NCP161AFCT330T2G	SCY99224AFCT115T2G
NCP161AFCT300T2G	SCY99224AFCT115T2G
NCP161AFCT285T2G	SCY99224AFCT115T2G
NCP161AFCT280T2G	SCY99224AFCT115T2G
NCP161AFCT185T2G	SCY99224AFCT115T2G



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NCP161AFCT180T2G	SCY99224AFCT115T2G
NCP160BFCT280T2G	SCY99224AFCT115T2G
NCP160BFCT180T2G	SCY99224AFCT115T2G

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。



初回製品 / プロセス変更通知

文書番号# : IPCN23934XA

発行日 : 27 May 2021

認定計画:

デバイス名 : SCY99247CFCS120T2Gパッケージ : WLCSP-6 567XZ

テスト	規格	条件	間隔
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	3x reflow
TC	JESD22-A104	Ta= -40°C to +125°C	850 cyc
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
ED	ON Data Sheet	Test @ Cold & Room & Hot	Cpk ≥ 1.67
PD	JESD22-B100	Per case outline	Cpk > 1.67
SBS	AEC-Q100-010	Solder Ball Shear	Cpk > 1.67

デバイス名 : SCY99224AFCT115T2Gパッケージ : WLCSP-4 567VS

テスト	規格	条件	間隔
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	3x reflow
TC	JESD22-A104	Ta= -40°C to +125°C	850 cyc
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
ED	ON Data Sheet	Test @ Cold & Room & Hot	Cpk ≥ 1.67
PD	JESD22-B100	Per case outline	Cpk > 1.67
SBS	AEC-Q100-010	Solder Ball Shear	Cpk > 1.67

認定完了予定日 : 31 Aug 2021

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	SCY99224AFCT115T2G
NCP110AFCT080T2G	SCY99224AFCT115T2G
NCP110AFCT085T2G	SCY99224AFCT115T2G
NCP110AFCT100T2G	SCY99224AFCT115T2G
NCP110AFCT105T2G	SCY99224AFCT115T2G
NCP110AFCT110T2G	SCY99224AFCT115T2G
NCP110AFCT120T2G	SCY99224AFCT115T2G
NCP110AFCT180T2G	SCY99224AFCT115T2G
NCP110AFCT280T2G	SCY99224AFCT115T2G
NCP148AFCT180T2G	SCY99224AFCT115T2G



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NCP148AFCT250T2G	SCY99224AFCT115T2G
NCP148AFCT260T2G	SCY99224AFCT115T2G
NCP148AFCT270T2G	SCY99224AFCT115T2G
NCP148AFCT280T2G	SCY99224AFCT115T2G
NCP148AFCT285T2G	SCY99224AFCT115T2G
NCP160AFCT180T2G	SCY99224AFCT115T2G
NCP160AFCT285T2G	SCY99224AFCT115T2G
NCP160AFCT300T2G	SCY99224AFCT115T2G
NCP160AFCT330T2G	SCY99224AFCT115T2G
NCP160AFCT350T2G	SCY99224AFCT115T2G
NCP160AFCTC330T2G	SCY99224AFCT115T2G
NCP167BFCT330T2G	SCY99224AFCT115T2G
NCP167AFCTC350T2G	SCY99224AFCT115T2G
NCP167AFCT350T2G	SCY99224AFCT115T2G
NCP167AFCT330T2G	SCY99224AFCT115T2G
NCP167AFCT295T2G	SCY99224AFCT115T2G
NCP167AFCT285T2G	SCY99224AFCT115T2G
NCP167AFCT180T2G	SCY99224AFCT115T2G
NCP163AFCT330T2G	SCY99224AFCT115T2G
NCP163AFCT2925T2G	SCY99224AFCT115T2G
NCP163AFCT290T2G	SCY99224AFCT115T2G
NCP163AFCT285T2G	SCY99224AFCT115T2G
NCP163AFCT280T2G	SCY99224AFCT115T2G
NCP163AFCT180T2G	SCY99224AFCT115T2G
NCP161BFCT514T2G	SCY99224AFCT115T2G
NCP161BFCT280T2G	SCY99224AFCT115T2G
NCP161BFCT180T2G	SCY99224AFCT115T2G
NCP161AFCTC350T2G	SCY99224AFCT115T2G
NCP161AFCTC280T2G	SCY99224AFCT115T2G
NCP161AFCT350T2G	SCY99224AFCT115T2G
NCP161AFCT330T2G	SCY99224AFCT115T2G
NCP161AFCT300T2G	SCY99224AFCT115T2G
NCP161AFCT285T2G	SCY99224AFCT115T2G
NCP161AFCT280T2G	SCY99224AFCT115T2G



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NCP161AFCT185T2G	SCY99224AFCT115T2G
NCP161AFCT180T2G	SCY99224AFCT115T2G
NCP160BFCT280T2G	SCY99224AFCT115T2G
NCP160BFCT180T2G	SCY99224AFCT115T2G


Appendix A: Changed Products
PCN#: IPCN23934XA
Issue Date: May 27, 2021

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NCP110AFCT060T2G		SCY99224AFCT115T2G		
NCP148AFCT270T2G		SCY99224AFCT115T2G		
NCP148AFCT280T2G		SCY99224AFCT115T2G		
NCP160AFCT180T2G		SCY99224AFCT115T2G		
NCP160AFCT300T2G		SCY99224AFCT115T2G		
NCP160AFCT330T2G		SCY99224AFCT115T2G		
NCP160AFCT350T2G		SCY99224AFCT115T2G		
NCP167BFCT330T2G		SCY99224AFCT115T2G		
NCP167AFCT330T2G		SCY99224AFCT115T2G		
NCP167AFCT285T2G		SCY99224AFCT115T2G		
NCP167AFCT180T2G		SCY99224AFCT115T2G		
NCP163AFCT330T2G		SCY99224AFCT115T2G		
NCP163AFCT280T2G		SCY99224AFCT115T2G		
NCP161BFCT280T2G		SCY99224AFCT115T2G		
NCP161BFCT180T2G		SCY99224AFCT115T2G		
NCP161AFCT350T2G		SCY99224AFCT115T2G		
NCP161AFCT330T2G		SCY99224AFCT115T2G		
NCP161AFCT300T2G		SCY99224AFCT115T2G		
NCP161AFCT280T2G		SCY99224AFCT115T2G		
NCP161AFCT180T2G		SCY99224AFCT115T2G		
NCP110AFCT100T2G		SCY99224AFCT115T2G		