ON Semiconductor®

Final Product/Process Change Notification

Document # : FPCN22003Z
Issue Date: 8 November 2017

Title of Change:	Lead frame plating supplier change for STK984-190-E
Proposed Changed Material First Ship Date:	8 November 2018 or earlier upon customer approval
Current Material Last Order Date:	N/A
Current Material Last Delivery Date:	N/A
Product Category:	*Active components – Integrated circuits*
Contact information	Contact your local ON Semiconductor Sales Office or Tomohiro.Uda@onsemi.com
Samples	Contact your local ON Semiconductor Sales Office to place sample order. Sample requests are to be submitted no later than 45 days after publication of this change notification.
Sample Availability Date:	N/A
PPAP Availability Date:	18 March 2016
Additional Reliability Data	Contact your local ON Semiconductor Sales Office or Kazutoshi.Kitazume@onsemi.com
Type of Notification	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 12 months prior to implementation of the change or earlier upon customer approval. ON Semiconductor will consider this proposed change and it's conditions acceptable, unless an inquiry is made in writing within 45 days of delivery of this notice. To do so, contact <PCN.Support@onsemi.com>.
Change Category	**Type of Change**
Process – Assembly	New / change of lead frame plating

Description and Purpose:

This is a Final Process Change to announce the replacement of existing lead frame plating for STK984-190-E.

The reason is that the existing plating supplier of lead frame will be end of life.

The table below shows comparison of lead frame plating between two materials.

Process	Changing Point	Contents					Remark
		Machine	Man	Method	Material	Spec	
Raw Material	Yes / No	No	No	No	No	No	No change
	Point	—	—	—	—		
Plating	Yes / No	Yes	Yes	Yes	Yes	No	Supplier change Supplier A → B
	Point	B	B	B	B		
Stamping	Yes / No	No	No	No	No	No	No change
	Point	—	—	—	—		

The change point of the lead frame plating specification.

Item		Before Change	After Change
Plating Spec.	Ni Plating	Min1.5um	No change
	Sn Plating	Min3.0um	No change
	Plating method	Electroplating	No change
	Glossiness	Mat	No change
Supplier		A	B
IPD Package Dimensions		No change	

Reason / Motivation for Change:	This is a Final Process Change to announce the replacement of existing lead frame plating for STK984-190-E. The reason is that the existing plating supplier of lead frame will be end of life.
Anticipated impact on fit, form, function, reliability, product safety or manufacturability	No anticipated impacts.

Sites Affected:

☐ All site(s) ☐ not applicable ☒ ON Semiconductor site(s) : *ON Dong Nai Province, Vietnam* ☐ External Foundry/Subcon site(s)

Marking of Parts/ Traceability of Change:	Identification via lot code

Reliability Data Summary:

QV DEVICE NAME: STK984-190-E

RMS:
Reference (Generic reliability data)
STK984-170-E (Rel. Tracking# J38132)

PACKAGE: DIP-S3

Test	Specification	Condition	Interval	Results
H3TRB	EIAJ ED-4701/100 Test Method 102	Ta=85°C, 85%RH, VDS=40V	1000hrs	0/11
AC	EIAJ ED-4701 B-123	Ta=121°C,100%RH, 2.05x10^5 Pa	96hrs	0/11
TC	EIAJ ED-4701/100 Test Method 105	Ta= -40°C to +150°C	1000cyc	0/11
HTSL	EIAJ ED-4701/200 Test Method 201	Ta = 150°C	1000hrs	0/11
HTRB	EIAJ ED-4701/100 Test Method 101	Ta = 150°C, VDS=40V	1000hrs	0/11

Electrical Characteristic Summary:

Electrical characteristics are not impacted.

List of affected Standard Parts:

Current Part Number	New Part Number	Qualification Vehicle
STK984-190-E	STK984-190-E	STK984-170-E