



Title of Change:	Materials change for SO8 products assembled in Subcontractor location, Liteon Thailand.	
Proposed first ship date:	Oct. 09, 2017	
Contact information:	Contact your local ON Semiconductor Sales Office or < chiewting.soh@onsemi.com >	
Samples:	Contact your local ON Semiconductor Sales Office	
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office	
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:	1742	
Change category:	☐ Wafer Fab Change ☒ Assembly Change ☐ Test Change ☐ Other	
Change Sub-Category(s):		
☐ Manufacturing Site Change/Addition ☐ Manufacturing Process Change ☒ Material Change ☐ Product specific change ☐ Datasheet/Product Doc change ☐ Shipping/Packaging/Marking ☐ Other		
Sites Affected:		
☐ All site(s) ☐ Not applicable ☐ ON Semiconductor site(s) ☒ External Foundry/Subcon site(s) Select site: Select site: LITEONBK		
Description and Purpose:		
Change of dual row leadframe to matrix format leadframe with related BOM changes for SO8 products assembled in Subcontractor location, Liteon Thailand.		
	Description of Change (From)	Description of Change (To) :
Leadframe Material	Alloy 42 (Internal Production Format- Dual row)	Copper Alloy C194 (Internal Production Format- Matrix)
Plating Material	Pure Tin	NiPdAu (Pre-Plated Frame)
LED Component	N-up AlGaAs	P-up AlGaAs
Reason for Change: - Better quality through equipment upgrades (Dual Row leadframe to Matrix format leadframe). - Increase and improve supply capacity and flexibility.		
Reliability Data Summary:		



QV DEVICE NAME: FOD073L

PACKAGE: SOIC8L

Qual Plan : Q20160678

Test	Specification	Condition	Interval	Results
LTSL	JESD22-A119	Ta=-40°C	1000 hours	0/77
HTSL	JESD22-A103	Ta=125°C	1000 hours	0/77
PC	J-STD-020 JESD-A113	M5L 1 @ 260 °C	-	0/308
HTOL + PC	JESD22-A108	Ta= 85°C / Bias	1000 hours	0/77
IOL + PC	MIL-STD-750 (M1037)	Ta=+25°C, delta Tj=60°C On/off = 2 min	15,000 cycles	0/77
THBT + PC	JESD22-A101	Ta=85°C, 85% / Bias	1000 hours	0/77
TC + PC	JESD22-A104	Ta= -40°C to +125°C	1000 cycles	0/77
RSH	JESD22- B106	Ta = 260C, 10 sec	-	0/10
SD	JSTD002	Ta = 245C, 10 sec	-	0/11
PD	JESD22 B100	Package outline as per datasheet	-	0/10

QV DEVICE NAME: HCPL0531

PACKAGE: SOIC8L

Qual Plan : Q20160678

Test	Specification	Condition	Interval	Results
LTSL	JESD22-A119	Ta=-40°C	1000 hours	0/77
HTSL	JESD22-A103	Ta=125°C	1000 hours	0/77
PC	J-STD-020 JESD-A113	M5L 1 @ 260 °C	-	0/308
HTOL + PC	JESD22-A108	Ta= 85°C / Bias	1000 hours	0/77
IOL + PC	MIL-STD-750 (M1037)	Ta=+25°C, delta Tj=60°C On/off = 2 min	15,000 cycles	0/77
THBT + PC	JESD22-A101	Ta=85°C, 85% / Bias	1000 hours	0/77
TC + PC	JESD22-A104	Ta= -40°C to +125°C	1000 cycles	0/77
RSH	JESD22- B106	Ta = 260C, 10 sec	-	0/10
SD	JSTD002	Ta = 245C, 10 sec	-	0/11
PD	JESD22 B100	Package outline as per datasheet	-	0/10



QV DEVICE NAME: HCPL0601

PACKAGE: SOIC 8L

Qual Plan : Q20160678

Test	Specification	Condition	Interval	Results
LTSL	JESD22-A119	Ta=-40°C	1000 hours	0/77
HTSL	JESD22-A103	Ta=125°C	1000 hours	0/77
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	-	0/308
HTOL + PC	JESD22-A108	Ta= 85°C / Bias	1000 hours	0/77
IOL + PC	MIL-STD-750 (M1037)	Ta=+25°C, delta Tj=60°C On/off = 2 min	15,000 cycles	0/77
THBT + PC	JESD22-A101	Ta=85°C, 85% / Bias	1000 hours	0/77
TC + PC	JESD22-A104	Ta= -40°C to +125°C	1000 cycles	0/77
RSH	JESD22- B106	Ta = 260C, 10 sec	-	0/10
SD	JSTD002	Ta = 245C, 10 sec	-	0/11
PD	JESD22 B100	Package outline as per datasheet	-	0/10

QV DEVICE NAME: HCPL0701

PACKAGE: SOIC 8L

Qual Plan : Q20160678

Test	Specification	Condition	Interval	Results
LTSL	JESD22-A119	Ta=-40°C	1000 hours	0/77
HTSL	JESD22-A103	Ta=125°C	1000 hours	0/77
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	-	0/308
HTOL + PC	JESD22-A108	Ta= 85°C / Bias	1000 hours	0/77
IOL + PC	MIL-STD-750 (M1037)	Ta=+25°C, delta Tj=60°C On/off = 2 min	15,000 cycles	0/77
THBT + PC	JESD22-A101	Ta=85°C, 85% / Bias	1000 hours	0/77
TC + PC	JESD22-A104	Ta= -40°C to +125°C	1000 cycles	0/77
RSH	JESD22- B106	Ta = 260C, 10 sec	-	0/10
SD	JSTD002	Ta = 245C, 10 sec	-	0/11
PD	JESD22 B100	Package outline as per datasheet	-	0/10



QV DEVICE NAME: HCPL0731

PACKAGE: SOIC 8L

Qual Plan: Q20160678

Test	Specification	Condition	Interval	Results
LTSL	JESD22-A119	Ta=-40°C	1000 hours	0/77
HTSL	JESD22-A103	Ta=125°C	1000 hours	0/77
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	-	0/308
HTOL + PC	JESD22-A108	Ta= 85°C / Bias	1000 hours	0/77
IOL + PC	MIL-STD-750 (M1037)	Ta=+25°C, delta Tj=60°C On/off = 2 min	15,000 cycles	0/77
THBT + PC	JESD22-A101	Ta=85°C, 85% / Bias	1000 hours	0/77
TC + PC	JESD22-A104	Ta= -40°C to +125°C	1000 cycles	0/77
RSH	JESD22- B106	Ta = 260C, 10 sec	-	0/10
SD	JSTD002	Ta = 245C, 10 sec	-	0/11
PD	JESD22 B100	Package outline as per datasheet	-	0/10

QV DEVICE NAME: FOD8001

PACKAGE: SOIC 8L

Qual Plan: Q20160678

Test	Specification	Condition	Interval	Results
LTSL	JESD22-A119	Ta=-40°C	1000 hours	0/77
HTSL	JESD22-A103	Ta=125°C	1000 hours	0/77
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	-	0/154
THS + PC	JESD22-A101	Ta=85°C, 85% / Unbias	1000 hours	0/77
TC + PC	JESD22-A104	Ta= -40°C to +125°C	1000 cycles	0/77
RSH	JESD22- B106	Ta = 260C, 10 sec	-	0/10
SD	JSTD002	Ta = 245C, 10 sec	-	0/11
PD	JESD22 B100	Package outline as per datasheet	-	0/10

Electrical Characteristic Summary:

Electrical characteristics are not impacted.

Qualification Plan:

Refer to Reliability Data Summary.



List of Affected Part(s):

Part Number	Qualification Vehicle
FOD050L	HCPL0701, HCPL0601
FOD050LR2	HCPL0701, HCPL0601
FOD053L	FOD073L, HCPL0731
FOD053LR2	FOD073L, HCPL0731
FOD060L	HCPL0701, HCPL0601
FOD060LR2	HCPL0701, HCPL0601
FOD0710	FOD8001
FOD0710R2	FOD8001
FOD0720	FOD8001
FOD0720R2	FOD8001
FOD0721	FOD8001
FOD0721R2	FOD8001
FOD073L	FOD073L, HCPL0731
FOD073LR2	FOD073L, HCPL0731
FOD8001	FOD8001
FOD8001R2	FOD8001
HCPL0453	HCPL0701, HCPL0601
HCPL0453R2	HCPL0701, HCPL0601
HCPL0500	HCPL0701, HCPL0601
HCPL0500R2	HCPL0701, HCPL0601
HCPL0500R2V	HCPL0701, HCPL0601
HCPL0500V	HCPL0701, HCPL0601
HCPL0501	HCPL0701, HCPL0601
HCPL0501R2	HCPL0701, HCPL0601
HCPL0501R2V	HCPL0701, HCPL0601
HCPL0501V	HCPL0701, HCPL0601
HCPL0531	FOD073L, HCPL0731
HCPL0531R2	FOD073L, HCPL0731
HCPL0534	FOD073L, HCPL0731
HCPL0534R2	FOD073L, HCPL0731
HCPL0600	HCPL0701, HCPL0601
HCPL0600R2	HCPL0701, HCPL0601
HCPL0601	HCPL0701, HCPL0601
HCPL0601R2	HCPL0701, HCPL0601
HCPL0601R2V	HCPL0701, HCPL0601
HCPL0601V	HCPL0701, HCPL0601
HCPL0611	HCPL0701, HCPL0601
HCPL0611R2	HCPL0701, HCPL0601
HCPL062N	FOD073L, HCPL0731
HCPL062NR2	FOD073L, HCPL0731



List of Affected Part(s):

Part Number	Qualification Vehicle
HCPL0637	FOD073L, HCPL0731
HCPL0637R2	FOD073L, HCPL0731
HCPL0638	FOD073L, HCPL0731
HCPL0638R2	FOD073L, HCPL0731
HCPL0639	FOD073L, HCPL0731
HCPL0639R2	FOD073L, HCPL0731
HCPL0700	HCPL0701, HCPL0601
HCPL0700R2	HCPL0701, HCPL0601
HCPL0700V	HCPL0701, HCPL0601
HCPL0701	HCPL0701, HCPL0601
HCPL0701R2	HCPL0701, HCPL0601
HCPL0701R2V	HCPL0701, HCPL0601
HCPL0701V	HCPL0701, HCPL0601
HCPL0731	FOD073L, HCPL0731
HCPL0731R2	FOD073L, HCPL0731