



Final Product/Process Change Notification

Document #:FPCN24455X

Issue Date:10 May 2022

Title of Change:	Qualification of 2nd lead frame supplier for MSOP8 at UTAC Thai Limited, Thailand
Proposed First Ship date:	15 Aug 2022 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office or Wirasa.Nontharith@onsemi.com
PCN Samples Contact:	Contact your local onsemi Sales Office. 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 onsemi Sales Office or Lalan.Ortega@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. onsemi 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
Marking of Parts/ Traceability of Change:	Affected parts will be identified by the date code.
Change Category:	Assembly Change
Change Sub-Category(s):	Material Change

Sites Affected:

onsemi Sites

None

External Foundry/Subcon Sites

UTAC, Thailand

Description and Purpose:

onsemi would like to notify our customers of our qualification of second lead frame supplier, HDS, at UTAC Thai Limited, Thailand. This will allow more flexibility on lead frame management and prevent lead frame shortage issues.

	Before Change Description	After Change Description
LeadFrame	LF PPF	LF PPF and PPF+ RT -UPG
Plating	Standard PPF Ni: 0.6-2.0 um Pd: 0.0127-0.15 um Au: 0.003-0.015 um	Standard PPF Ni: 0.6-2.0 um Pd: 0.0127-0.15 um Au: 0.003-0.015 um and Upgrade uPPF rough (UPG-RT) Ni: 0.254~1.27 um Pd: 0.005~0.0203 um Au-Ag alloy: 0.005-0.0635 um

There is no change in form, fit and function.

There is no product marking change as a result of this change.



Final Product/Process Change Notification

Document #:FPCN24455X

Issue Date:10 May 2022

Reliability Data Summary:

QV DEVICE NAME: CAT5140ZI-50-GT3

RMS: S80813

PACKAGE: MSOP 8

Test	Specification	Condition	Interval	Results
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0 / 231
TC	JESD22-A104	Ta= -65°C to +150°C	1000 cyc	0 / 231
HAST	JESD22-A110	Ta= 130°C, 85% RH, 18.8psig, bias	96 hrs	0 / 231
uHAST	JESD22-A118	Ta= 130°C, 85% RH, 18.8psig, unbiased	96 hrs	0 / 231
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C		0 / 693
SD	J-STD-002	Ta = 245C, 5 sec		0 / 33
SAT	J-STD-035	Delamination before and after precon		0 / 22
WBPS	Mil-Std-883 Method 2011	Min Cpk 1.67		0 / 30
WBS	AEC-Q100-001	Min Cpk 1.67		0 / 30
DSS	Mil-Std-883 Method 2019	Min Cpk 1.67 / min 0.4 gF/SQ.mil		0 / 30

Electrical Characteristics 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
CAT5140ZI-50-GT3	CAT5140ZI-50-GT3
CAT5115ZI-10-GT3	CAT5140ZI-50-GT3

Appendix A: Changed Products

PCN#: FPCN24455X
Issue Date: May 10, 2022

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
CAT5140ZI-50-GT3		CAT5140ZI-50-GT3	NA	