Final Product/Process Change Notification

Document #:FPCN27248X
Issue Date:15 Nov 2026

Title of Change:	Dual source for Logic products - Dual-Source Fab at East Fishkill and assembly and test at onsemi Carmona
Proposed First Ship date:	22 Feb 2027 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office
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
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:	Packaging Label will have unique country of origin code
Change Category:	Wafer Fab Change, Test Change, Assembly Change
Change Sub-Category(s):	Material Change, Manufacturing Site Addition

Sites Affected:

onsemi Sites	**External Foundry/Subcon Sites**
onsemi Carmona, Philippines	None
onsemi, East Fishkill	

Description and Purpose:

This is to notify onsemi customers of select Logic products currently being manufactured at Vanguard of our intent to dual-source fabrication with the onsemi site at East Fishkill. The EFK-built products will run on a new design and fabrication process. Also, the EFK supply will have all packaging and test operations only at the Carmona site.

The SOIC14 and TSSOP14 package types will have assembly material changes at the Carmona facility, compared to the current bill of materials. Change table below defines the differences. Products fabricated at Vanguard will maintain the same supply chain and assembly materials as they currently use.

TSSOP 14 Package - Change Description, OPN specific

For the following affected OPN's:
74LCX08MTCX, 74LCX14MTCX, 74LVX00MTCX, 74LVX08MTCX, 74LVX14MTCX, 74LVX32MTCX, 74LVX74MTCX, 74VHC14MTCX, 74VHC32MTCX, 74VHC74MTCX, MC74HC00ADTR2G, MC74HC14ADTR2G, MC74HC74ADTR2G, MC74HCT14ADTR2G, MC74VHC08DTR2G, MC74VHC126DTR2G

	Before Change Description	**After Change Description**	
Fab site	Vanguard	Vanguard	onsemi – EKF site
Wafer diameter	8"	8"	12"
Assembly site	ATEC & Carmona	ATEC & Carmona	Carmona
Lead Frame	**ATEC**: Ag Stamped **Carmona**: NIPDAU PPF	**ATEC**: Ag Stamped **Carmona**: NIPDAU PPF	Spot Ag
Mold Compound	**ATEC**: G600 **Carmona**: G700LS	**ATEC**: G600 **Carmona**: G700LS	G700LS
Final Test site	ATEC & Carmona	ATEC & Carmona	Carmona

TSSOP 14 Package - Change Description, OPN specific

For the following affected OPN's:

MC74ACT14DTR2G, MC74LCX04DTR2G, MC74LCX08DTR2G, MC74LCX14DTR2G, MC74VHC00DTR2G, MC74VHC14DTR2G

	Before Change Description	After Change Description	
Fab site	Vanguard	Vanguard	onsemi – EKF site
Wafer diameter	8"	8"	12"
Assembly site	Carmona	Carmona	Carmona
Lead Frame	NIPDAU PPF	NIPDAU PPF	Spot Ag
Final Test site	Carmona	Carmona	Carmona

SOIC14 Package - Change Description, All SOIC14 OPN

For the following SOIC14 OPN's:

74ACT08SC, 74ACT08SCX, MC74AC04DR2G, MC74ACT08DR2G, MC74ACT14DR2G, MC74HC00ADR2G, MC74HC08ADR2G, MC74HC14ADR2G, MC74LCX14DR2G

	Before Change Description	After Change Description	
Fab site	Vanguard	Vanguard	onsemi – EKF site
Wafer diameter	8"	8"	12"
Assembly site	Carmona, ATX Kunshan, Hana Semiconductor	Carmona, ATX Kunshan, Hana Semiconductor	Carmona
LeadFrame	**Carmona**: Cu with Ag Spot **ATX Kunshan**: Cu with Ag spot **Hana**: Stamped PPF	**Carmona**: Cu with Ag Spot **ATX Kunshan**: Cu with Ag spot **Hana**: Stamped PPF	Cu with Ag Spot
Mold Compound	**Carmona**: G600 **ATX Kunshan**: CEL9240HF10AK **Hana**: G600	**Carmona**: G600 **ATX Kunshan**: CEL9240HF10AK **Hana**: G600	G700LS
Final Test site	Carmona	Carmona	Carmona

There is no change to product marking.

Reliability Data Summary:

QV DEVICE NAME: MC74HC14ADR2G
RMS: O109071
PACKAGE SOIC14

Test	Specification	Condition	Interval	Results
High Temperature Operating Life	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs	0/231
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs	0/231
Early Life Failure Rate	JESD22-A108	Ta=125°C, 100 % max rated Vcc	48 hrs	0/2400
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260 °C, Pre TC, uHAST, HAST		0/693
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/231
Highly Accelerated Stress Test	JESD22-A110	110°C, 85% RH, 18.8psig, bias	264 hrs	0/231
Unbiased Highly Accelerated Stress Test	JESD22-A118	110°C, 85% RH, 18.8psig, unbiased	264 hrs	0/231

QV DEVICE NAME MC74LCX14DTR2G
RMS O109072
PACKAGE TSSOP14

Test	Specification	Condition	Interval	Results
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs	0/231
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260 °C, Pre TC, uHAST, HAST		0/693
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/231
Highly Accelerated Stress Test	JESD22-A110	110°C, 85% RH, 18.8psig, bias	264 hrs	0/231
Unbiased Highly Accelerated Stress Test	JESD22-A118	110°C, 85% RH, 18.8psig, unbiased	264 hrs	0/231

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*****.**

Current Part Number	New Part Number	Qualification Vehicle
MC74VHC14DTR2G	#NONE	MC74LCX14DTR2G
MC74VHC126DTR2G	#NONE	MC74LCX14DTR2G
MC74VHC08DTR2G	#NONE	MC74LCX14DTR2G
MC74VHC00DTR2G	#NONE	MC74LCX14DTR2G
MC74LCX14DTR2G	#NONE	MC74LCX14DTR2G
MC74LCX14DR2G	#NONE	MC74HC14ADR2G

MC74LCX08DTR2G	#NONE	MC74LCX14DTR2G
MC74LCX04DTR2G	#NONE	MC74LCX14DTR2G
MC74HCT14ADTR2G	#NONE	MC74LCX14DTR2G
MC74HC74ADTR2G	#NONE	MC74LCX14DTR2G
MC74HC14ADTR2G	#NONE	MC74LCX14DTR2G
MC74HC14ADR2G	#NONE	MC74HC14ADR2G
MC74HC08ADR2G	#NONE	MC74HC14ADR2G
MC74HC00ADTR2G	#NONE	MC74LCX14DTR2G
MC74HC00ADR2G	#NONE	MC74HC14ADR2G
MC74ACT14DTR2G	#NONE	MC74LCX14DTR2G
MC74ACT14DR2G	#NONE	MC74HC14ADR2G
MC74ACT08DR2G	#NONE	MC74HC14ADR2G
MC74AC04DR2G	#NONE	MC74HC14ADR2G
74VHC74MTCX	#NONE	MC74LCX14DTR2G
74VHC32MTCX	#NONE	MC74LCX14DTR2G
74VHC14MTCX	#NONE	MC74LCX14DTR2G
74LVX74MTCX	#NONE	MC74LCX14DTR2G
74LVX32MTCX	#NONE	MC74LCX14DTR2G
74LVX14MTCX	#NONE	MC74LCX14DTR2G
74LVX08MTCX	#NONE	MC74LCX14DTR2G
74LVX00MTCX	#NONE	MC74LCX14DTR2G
74LCX14MTCX	#NONE	MC74LCX14DTR2G
74LCX08MTCX	#NONE	MC74LCX14DTR2G
74ACT08SCX	#NONE	MC74HC14ADR2G
74ACT08SC	#NONE	MC74HC14ADR2G