



Title of Change:	Migration of HC/HCT/VHC/VHCT/LVX Legacy Fairchild Products to ON Semiconductor qualified BOM and manufacturing site.
Proposed first ship date:	10 July 2018
Contact information:	Contact your local ON Semiconductor Sales Office or < Steven.Zhong@onsemi.com >
Samples:	Contact your local ON Semiconductor Sales Office
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or < ChangKit.Mok@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. 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:	Affected products will be identified with ON logo and ON standard Trace code.
Change category:	☒ Wafer Fab Change ☒ Assembly Change ☒ Test Change ☐ Other _____

Change Sub-Category(s):☒ Manufacturing Site Change/Addition☒ Material Change☐ Datasheet/Product Doc change☐ Shipping/Packaging/Marking☐ Manufacturing Process Change☐ Product specific change☐ Other: _____**Sites Affected:**

ON Semiconductor Sites:
ON Carmona, Philippines
ON Maine, US

External Foundry/Subcon Sites:

Subcon, Japan
Subcon, Thailand
Subcon, Taiwan
Subcon, Philippines
Subcon, Israel
Subcon, China

Description and Purpose:

This Final Notification announces to the customers the change of HC/HCT/VHC/VHCT/LVX Legacy Fairchild Products fab, assembly & test to existing qualified BOM and SITES as listed in table below.

		Before 90 day PCN expires			Between PCN expires and Jan 1st 2019			After Jan 1st 2019			
		Subcon China ON S. Portland Maine			Subcon China ON S. Portland Maine			Subcon Israel			
Package	Assembly Site	Subcon Philippines	Subcon Thailand	Subcon Taiwan	Subcon Philippines	Subcon Thailand	Subcon Taiwan	ON Semiconductor or, Philippines	Subcon China	ON Semiconductor or, Philippines	Subcon China
TSSOP-14	Leadframe	Pre plated leadframe (NiPdAu)	Not applicable	Not applicable	Pre plated leadframe (NiPdAu)	Not applicable	Not applicable	Pre plated leadframe (NiPdAu)	Copper with Ag plated	Pre plated leadframe (NiPdAu)	Copper with Ag plated
	Die attach	QMI519 (Henkel)			QMI519 (Henkel)			CRM-1076WB (Sumitomo)	EN-4900	CRM-1076WB (Sumitomo)	EN-4900
	Wire	Au wire			Au wire			Copper wire	Copper wire	Copper wire	Copper wire
	Lead finish	NiPdAu			NiPdAu			NiPdAu	Sn	NiPdAu	Sn
	Compound	CEL800JF (Hitachi)			CEL800JF (Hitachi)			EME G600 or EME 700 (Sumitomo)	G700	EME G600 or EME 700 (Sumitomo)	G700
TSSOP-16	Leadframe	Pre plated leadframe (NiPdAu)	Not applicable	Not applicable	Pre plated leadframe (NiPdAu)	Not applicable	Not applicable	Pre plated leadframe (NiPdAu)	Copper with Ag plated	Pre plated leadframe (NiPdAu)	Copper with Ag plated
	Die attach	QMI519 (Henkel)			QMI519 (Henkel)			CRM-1076WB (Sumitomo)	EN-4900	CRM-1076WB (Sumitomo)	EN-4900
	Wire	Au wire			Au wire			Copper wire	Copper wire	Copper wire	Copper wire
	Lead finish	NiPdAu			NiPdAu			NiPdAu	Sn	NiPdAu	Sn



	Compound	CEL800JF (Hitachi)			CEL800JF (Hitachi)			EME G600 or EME 700 (Sumitomo)	G700	EME G600 or EME 700 (Sumitomo)	G700
TSSOP-20	Leadframe	Pre plated leadframe (NiPdAu)	Not applicable	Not applicable	Pre plated leadframe (NiPdAu)	Not applicable	Not applicable	Pre plated leadframe (NiPdAu)	Copper with Ag plated	Pre plated leadframe (NiPdAu)	Copper with Ag plated
	Die attach	QMI519 (Henkel)			QMI519 (Henkel)			CRM-1076WB (Sumitomo)	EN-4900	CRM-1076WB (Sumitomo)	EN-4900
	Wire	Au wire			Au wire			Copper wire	Copper wire	Copper wire	Copper wire
	Lead finish	NiPdAu			NiPdAu			NiPdAu	Sn	NiPdAu	Sn
	Compound	CEL800JF (Hitachi)			CEL800JF (Hitachi)			EME G600 or EME 700 (Sumitomo)	G700	EME G600 or EME 700 (Sumitomo)	G700
SOIC-14	Leadframe	Pre plated leadframe (NiPdAu)	14L C194	Not applicable	Pre plated leadframe (NiPdAu)	14L C194	Not applicable	Copper with Ag plated	Copper with Ag plated	Copper with Ag plated	Copper with Ag plated
	Die attach	QMI519 (Henkel)	QMI519 (Henkel)		QMI519 (Henkel)	QMI519 (Henkel)		CRM-1076WB (Sumitomo)	EN-4900	CRM-1076WB (Sumitomo)	EN-4900
	Wire	Au wire	Au wire		Au wire	Au wire		Copper wire	Copper wire	Copper wire	Copper wire
	Lead finish	NiPdAu	Sn		NiPdAu	Sn		Sn	Sn	Sn	Sn
	Compound	CEL8240HF (Hitachi)	CEL8240HF10L YR (Hitachi)		CEL8240HF (Hitachi)	CEL8240HF10L YR (Hitachi)		EME G600 (Sumitomo)	CEL-9240	EME G600 (Sumitomo)	CEL-9240
SOIC-16	Leadframe	SOIC 16L	Not applicable	Not applicable	SOIC 16L	Not applicable	Not applicable	Copper with Ag plated	Copper with Ag plated	Copper with Ag plated	Copper with Ag plated
	Die attach	DA EPOXY HI POLY6 CON			DA EPOXY HI POLY6 CON			SUMITOMO CRM-1076WB	EN-4900	SUMITOMO CRM-1076WB	EN-4900
	Wire	Au wire			Au wire			Copper wire	Copper wire	Copper wire	Copper wire
	Lead finish	Sn			Sn			Sn	Sn	Sn	Sn
	Compound	COOKSON AMC2P			COOKSON AMC2P			EME G600 (Sumitomo)	CEL-9240	EME G600 (Sumitomo)	CEL-9240
SOIC-20W	Leadframe	Copper with Ag plated	Not applicable	20L A194	Copper with Ag plated	Not applicable	20L A194	Copper with Ag plated	Copper with Ag plated	Copper with Ag plated	Copper with Ag plated
	Die attach	CRM1076D JG (Sumitomo)		CRM1076D JG	CRM1076D JG (Sumitomo)		CRM1076D JG	CRM-1076WB (Sumitomo)	EN-4900	CRM-1076WB (Sumitomo)	EN-4900
	Wire	Au wire		Au wire	Au wire		Au wire	Copper wire	Copper wire	Copper wire	Copper wire
	Lead finish	Sn		Sn	Sn		Sn	Sn	Sn	Sn	Sn
	Compound	G700H (Sumitomo)		G700H (Sumitomo)	G700H (Sumitomo)		G700H (Sumitomo)	EME G600 (Sumitomo)	CEL-9240	EME G600 (Sumitomo)	CEL-9240
	Test Site	Subcon Philippines	Subcon Thailand	Subcon Taiwan	Subcon Philippines	Subcon Thailand	Subcon Taiwan	ON Semiconductor or, Philippines	Subcon China or ON Semiconductor or, Philippines	ON Semiconductor or, Philippines	Subcon China or ON Semiconductor or, Philippines



Reliability Data Summary:

PACKAGE: TSSOP-20

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs	0/480
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/480
PC	J-STD-020 / JESD-A113	MSL 1 @260 °C	-	0/960
TC + PC	JESD22-A104	Ta= -65°C to +150°C	1000 cyc	0/480
uHAST + PC	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/480
RSH	JESD22- B106	Ta = 265C, 10 sec	-	0/60
SD	JSTD002	Ta = 245C, 10 sec	-	0/90

PACKAGE: SOIC-16

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs	0/480
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/480
PC	J-STD-020 / JESD-A113	MSL 1 @ 260°C	-	0/960
TC + PC	JESD22-A104	Ta= -65°C to +150°C	1000 cyc	0/480
uHAST + PC	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/480
RSH	JESD22- B106	Ta = 265C, 10 sec	-	0/60
SD	JSTD002	Ta = 245C, 10 sec	-	0/90

PACKAGE: SOIC-20W

Test	Specification	Condition	Interval	Results
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/480
PC	J-STD-020 / JESD-A113	MSL 3 @ 260°C	-	0/480
TC + PC	JESD22-A104	Ta= -65°C to + 150°C	1000 cyc	0/240
uHAST + PC	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/240
RSH	JESD22- B106	Ta = 265C, 10 sec	-	0/30
SD	JSTD002	Ta = 245C, 10 sec	-	0/45

Electrical Characteristic Summary:

New material meets datasheet specifications. Side-by-side comparison of characterization data is available upon request.



List of Affected Parts:

Part Number	Qualification Vehicle
MM74HC595M	MC74HC595ADG
MM74HC595MX	MC74HC595ADR2G
MM74HC595MTCX	MC74HC595ADTR2G
MM74HC595MTC	MC74HC595ADTG
MM74HC14MX	MC74HC14ADR2G
MM74HC14M	MC74HC14ADG
MM74HC14MTCX	MC74HC14ADTR2G
MM74HC14MTC	MC74HC14ADTG
MM74HC74AMX	MC74HC74ADR2G
MM74HC74AM	MC74HC74ADR2G
MM74HC74AMTCX	MC74HC74ADTR2G
MM74HC74AMTC	MC74HC74ADTR2G
MM74HC132MX	MC74HC132ADR2G
MM74HC132M	MC74HC132ADG
MM74HC132MTCX	MC74HC132ADTR2G
MM74HC132MTC	MC74HC132ADTG
MM74HC541MTCX	MC74HC541ADTR2G
MM74HC541MTC	MC74HC541ADTR2G
MM74HC541WM	MC74HC541ADWR2G
MM74HC541WMX	MC74HC541ADWR2G
MM74HC08MX	MC74HC08ADR2G
MM74HC08M	MC74HC08ADG
MM74HC08MTCX	MC74HC08ADTR2G
MM74HC08MTC	MC74HC08ADTR2G
MM74HC04MX	MC74HC04ADR2G
MM74HC04M	MC74HC04ADG
MM74HC04MTCX	MC74HC04ADTR2G
MM74HC04MTC	MC74HC04ADTR2G
MM74HC573MTCX	MC74HC573ADTR2G
MM74HC573MTC	MC74HC573ADTR2G
MM74HC573WMX	MC74HC573ADWR2G
MM74HC573WM	MC74HC573ADWR2G
MM74HC244MTCX	MC74HC244ADTR2G
MM74HC244MTC	MC74HC244ADTR2G



MM74HC244WM	MC74HC244ADWR2G
MM74HC244WMX	MC74HC244ADWR2G
MM74HC373MTCX	MC74HC373ADTR2G
MM74HC373MTC	MC74HC373ADTG
MM74HC373WMX	MC74HC373ADWR2G
MM74HC373WM	MC74HC373ADWG
MM74HC02M	MC74HC02ADG
MM74HC02MX	MC74HC02ADR2G
MM74HC02MTCX	MC74HC02ADTR2G
MM74HC02MTC	MC74HC02ADTR2G
MM74HC245AMTCX	MC74HC245ADTR2G
MM74HC245AMTC	MC74HC245ADTR2G
MM74HC245AWMX	MC74HC245ADWR2G
MM74HC245AWM	MC74HC245ADWR2G
MM74HC125MX	MC74HC125ADR2G
MM74HC125M	MC74HC125ADG
MM74HC125MTCX	MC74HC125ADTR2G
MM74HC125MTC	MC74HC125ADTR2G
MM74HC00MX	MC74HC00ADR2G
MM74HC00M	MC74HC00ADG
MM74HC00MTCX	MC74HC00ADTR2G
MM74HC00MTC	MC74HC00ADTR2G
MM74HC164M	MC74HC164ADG
MM74HC164MX	MC74HC164ADR2G
MM74HC164MTCX	MC74HC164ADTR2G
MM74HC164MTC	MC74HC164ADTR2G
MM74HC240MTCX	MC74HC240ADTR2G
MM74HC240MTC	MC74HC240ADTR2G
MM74HC240WMX	MC74HC240ADWR2G
MM74HC240WM	MC74HC240ADWG
MM74HCT14MX	MC74HCT14ADR2G
MM74HCT14M	MC74HCT14ADR2G
MM74HCT14MTCX	MC74HC14ADTR2G
MM74HCT14MTC	MC74HC14ADTR2G
MM74HC138MX	MC74HC138ADR2G
MM74HC138M	MC74HC138ADG
MM74HC138MTCX	MC74HC138ADTR2G



MM74HC138MTC	MC74HC138ADTR2G
MM74HCT244WMX	MC74HCT244ADWR2G
MM74HCT244WM	MC74HCT244ADWR2G
MM74HCT244MTC	MC74HC244ADTR2G
MM74HCT244MTCX	MC74HC244ADTR2G
MM74HC86MX	MC74HC86ADR2G
MM74HC86M	MC74HC86ADR2G
MM74HC86MTCX	MC74HC86ADTR2G
MM74HC86MTC	MC74HC86ADTR2G
MM74HC126MX	MC74HC126ADR2G
MM74HC126M	MC74HC126ADG
MM74HC126MTCX	MC74HC126ADTR2G
MM74HC273MTC	MC74HC273ADTR2G
MM74HC273MTCX	MC74HC273ADTR2G
MM74HC273WMX	MC74HC273ADWR2G
MM74HC273WM	MC74HC273ADWR2G
MM74HC32MX	MC74HC32ADR2G
MM74HC32M	MC74HC32ADR2G
MM74HC32MTCX	MC74HC32ADTR2G
MM74HC32MTC	MC74HC32ADTR2G
MM74HC540MTC	MC74HC540ADTR2G
MM74HC540MTCX	MC74HC540ADTR2G
MM74HC540WMX	MC74HC540ADWR2G
MM74HC540WM	MC74HC540ADWR2G
MM74HCT574MTC	MC74HC574ADTR2G
MM74HCT574MTCX	MC74HCT574ADTR2G
MM74HCT574WMX	MC74HCT574ADWR2G
MM74HCT574WM	MC74HCT574ADWR2G
MM74HCT04MX	MC74HCT04ADR2G
MM74HCT04M	MC74HCT04ADR2G
MM74HCT04MTCX	MC74HCT04ADTR2G
MM74HCT04MTC	MC74HCT04ADTR2G
MM74HCT08M	MC74HCT08ADG
MM74HCT08MX	MC74HCT08ADR2G
MM74HCT08MTCX	MC74HCT08ADTR2G
MM74HCT08MTC	MC74HCT08ADTG
MM74HCT541MTCX	MC74HC541ADTR2G



MM74HCT541MTC	MC74HC541ADTR2G
MM74HCT541WMX	MC74HCT541ADWR2G
MM74HCT541WM	MC74HCT541ADWR2G
MM74HCT245MTCX	MC74HC245ADTR2G
MM74HCT245MTC	MC74HC245ADTR2G
MM74HCT245WMX	MC74HCT245ADWR2G
MM74HCT245WM	MC74HCT245ADWR2G
MM74HC175MX	MC74HC175ADR2G
MM74HC175M	MC74HC175ADR2G
MM74HC175MTCX	MC74HC175ADTR2G
MM74HC374MTCX	MC74HC374ADTR2G
MM74HC374MTC	MC74HC374ADTR2G
MM74HC374WMX	MC74HC374ADWR2G
MM74HC374WM	MC74HC374ADWR2G
MM74HCU04MX	MC74HCU04ADR2G
MM74HCU04M	MC74HCU04ADR2G
MM74HCU04MTCX	MC74HCU04ADTR2G
MM74HCU04MTC	MC74HCU04ADTR2G
MM74HCT138MX	MC74HCT138ADR2G
MM74HCT138M	MC74HCT138ADR2G
MM74HCT138MTCX	MC74HCT138ADTR2G
MM74HCT138MTC	MC74HCT138ADTR2G
MM74HCT373MTCX	MC74HCT373ADTR2G
MM74HCT373MTC	MC74HCT373ADTR2G
MM74HCT373WMX	MC74HCT373ADWR2G
MM74HCT373WM	MC74HCT373ADWR2G
MM74HCT573MTCX	MC74HCT573ADTR2G
MM74HCT573MTC	MC74HCT573ADTR2G
MM74HCT573WMX	MC74HCT573ADWR2G
MM74HCT573WM	MC74HCT573ADWR2G
MM74HCT273MTCX	MC74HC273ADTR2G
MM74HCT273MTC	MC74HC273ADTR2G
MM74HCT273WMX	MC74HCT273ADWR2G
MM74HCT273WM	MC74HCT273ADWR2G
MM74HCT74M	MC74HCT74ADR2G
MM74HCT74MX	MC74HCT74ADR2G
MM74HCT74MTC	MC74HC74ADTR2G



MM74HCT74MTCX	MC74HC74ADTR2G
MM74HCT32MTCX	MC74HC32ADTR2G
MM74HCT32MTC	MC74HC32ADTR2G
MM74HCT32M	MC74HCT32ADG
MM74HCT32MX	MC74HCT32ADR2G
MM74HCT374MTCX	MC74HC374ADTR2G
MM74HCT374MTC	MC74HC374ADTR2G
MM74HCT374WMX	MC74HCT374ADWR2G
MM74HCT374WM	MC74HCT374ADWR2G
74VHC139M	MC74VHC139DR2G
74VHC139MTC	MC74VHC139DTR2G
74VHC139MTCX	MC74VHC139DTR2G
74VHC139MX	MC74VHC139DR2G
74LVX157MTCX	MC74LVX157DTR2G
74VHC157M	MC74VHC157DR2G
74VHC157MTC	MC74VHC157DTR2G
74VHC157MTCX	MC74VHC157DTR2G
74VHC157MX	MC74VHC157DR2G
74VHC240MTC	MC74VHC240DTR2G
74VHC240MTCX	MC74VHC240DTR2G
74VHCT138AMTC	MC74VHCT138ADTRG
74VHCT138AMTCX	MC74VHCT138ADTRG
74VHCT541AM	MC74VHCT541ADWRG
74VHCT541AMTC	MC74VHCT541ADTRG
74VHCT541AMTCX	MC74VHCT541ADTRG
74VHCT541AMX	MC74VHCT541ADWRG