



Title of Change:	SDIP Bridge Rectifiers Leadframe Change from Strip to Matrix, Pad Change Shape & Soldering Process from Manual to Auto.													
Proposed first ship date:	26 July 2018													
Contact information:	Contact your local ON Semiconductor Sales Office or <Benjo.Rulona@onsemi.com>.													
Samples:	Contact your local ON Semiconductor Sales Office													
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or <Ken.Fergus@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:	Cut off datecode: WK28 FY18													
Change category:	<input type="checkbox"/> Wafer Fab Change <input checked="" type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input type="checkbox"/> Other: _____													
Change Sub-Category(s):	<input type="checkbox"/> Manufacturing Site Change/Addition <input checked="" type="checkbox"/> Material Change <input type="checkbox"/> Datasheet/Product Doc change <input checked="" type="checkbox"/> Manufacturing Process Change <input type="checkbox"/> Product specific change <input type="checkbox"/> Shipping/Packaging/Marking <input type="checkbox"/> Other: _____													
Sites Affected:	ON Semiconductor Sites: None	External Foundry/Subcon Sites: Wuxi, China												
Description and Purpose:														
Process robustness; quality improvement due to automation of soldering process. Increase in productivity and capacity, quality improvement due to stable and controlled process by automation.														
<table border="1"> <thead> <tr> <th>Material to be changed</th> <th>Before Change Description</th> <th>After Change Description</th> </tr> </thead> <tbody> <tr> <td>Leadframe</td> <td>Strip</td> <td>Matrix</td> </tr> <tr> <td>Pad Shape</td> <td>Circle</td> <td>Square</td> </tr> <tr> <td>Soldering Die Bond Process</td> <td>Manual</td> <td>Automatic</td> </tr> </tbody> </table>			Material to be changed	Before Change Description	After Change Description	Leadframe	Strip	Matrix	Pad Shape	Circle	Square	Soldering Die Bond Process	Manual	Automatic
Material to be changed	Before Change Description	After Change Description												
Leadframe	Strip	Matrix												
Pad Shape	Circle	Square												
Soldering Die Bond Process	Manual	Automatic												
Unless otherwise indicated in the details of this notification, the identified changes will have no impact on product quality, reliability, electrical, thermal or mechanical performance and affected products will remain fully compliant to all published specifications. Products incorporating these changes may be shipped interchangeably with existing unchanged products.														



Reliability Data Summary:

QV DEVICE NAME: DF10SPACKAGE: SDIP

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=140°C, 80% max rated V	168 hrs 500 hrs 1000 hrs	0/77 0/77 0/77
THB	JESD22-A101	TA=85°C+/-2°C RH=85%+/-5% VR=80% rated V DC	168 hrs 500 hrs 1000 hrs	0/77 0/77 0/77
HTSL	JESD22-A103	Ta=150°C	168 hrs 500 hrs 1000 hrs	0/77 0/77 0/77
IOL	MIL-STD-750 (M1037) AEC-Q101	I=IF±10% DC supply On time: 2 mins at least, Off time : 2 mins at least	7500cyc 15000cyc	0/77 0/77
TC	JESD22-A104	Ta = -55°C to +150°C	500 cyc 1000 cyc	0/77 0/77
THS		TA=85°C RH=85%, unbiased	168 hrs 500 hrs 1000 hrs	0/77 0/77 0/77
AC	JESD-A102	TA= 121°C, P= 15psig Relative Humidity = 100%	96 hrs	0/77
RSH	JESD22- B106	Ta = 260±5°C, 10±1sec; Dipping depth=within 1.27mm of the body		0/30
SD	JSTD002	Ta = 245±5C, 5±0.5 sec		0/32

QV DEVICE NAME: DF10S1PACKAGE: SDIP

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=140°C, 80% max rated V	168 hrs 500 hrs 1000 hrs	0/77 0/77 0/77
THB	JESD22-A101	TA=85°C+/-2°C RH=85%+/-5% VR=80% rated V DC	168 hrs 500 hrs 1000 hrs	0/77 0/77 0/77
HTSL	JESD22-A103	Ta=150°C	168 hrs 500 hrs 1000 hrs	0/77 0/77 0/77
IOL	MIL-STD-750 (M1037) AEC-Q101	I=IF±10% DC supply On time: 2 mins at least, Off time : 2 mins at least	7500cyc 15000cyc	0/77 0/77
TC	JESD22-A104	Ta = -55°C to +150°C	500 cyc 1000 cyc	0/77 0/77
THS		TA=85°C RH=85%, unbiased	168 hrs 500 hrs 1000 hrs	0/77 0/77 0/77
AC	JESD-A102	TA= 121°C, P= 15psig Relative Humidity = 100%	96 hrs	0/77
RSH	JESD22- B106	Ta = 260±5°C, 10±1sec; Dipping depth=within 1.27mm of the body		0/30
SD	JSTD002	Ta = 245±5C, 5±0.5 sec		0/32



QV DEVICE NAME: DF10S2

PACKAGE: SDIP

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=140°C, 80% max rated V	168 hrs 500 hrs 1000 hrs	0/77 0/77 0/77
THB	JESD22-A101	TA=85°C+/-2°C RH=85%+/-5% VR=80% rated V DC	168 hrs 500 hrs 1000 hrs	0/77 0/77 0/77
HTSL	JESD22-A103	Ta=150°C	168 hrs 500 hrs 1000 hrs	0/77 0/77 0/77
IOL	MIL-STD-750 (M1037) AEC-Q101	I=IF±10% DC supply On time: 2 mins at least, Off time : 2 mins at least	7500cyc 15000cyc	0/77 0/77
TC	JESD22-A104	Ta= -55°C to +150°C	500 cyc 1000 cyc	0/77 0/77
THS		TA=85°C RH=85%, unbiased	168 hrs 500 hrs 1000 hrs	0/77 0/77 0/77
AC	JESD-A102	TA=121°C, P= 15psig Relative Humidity = 100%	96 hrs	0/77
RSH	JESD22- B106	Ta = 260±5°C, 10±1sec; Dipping depth=within 1.27mm of the body		0/30
SD	JSTD002	Ta = 245±5C, 5±0.5 sec		0/32

Electrical Characteristic Summary:

Electrical characteristics are not impacted.

List of Affected Standard Parts:

Part Number	Qualification Vehicle
DF005S	DF10S
DF01S	DF10S
DF02S	DF10S
DF04S	DF10S
DF06S	DF10S
DF08S	DF10S
DF10S	DF10S
DF005S1	DF10S1
DF01S1	DF10S1
DF02S1	DF10S1
DF04S1	DF10S1
DF06S1	DF10S1
DF08S1	DF10S1
DF10S1	DF10S1



Appendix A: Changed Products

Product	Customer Part Number	Qualification Vehicle
DF005S		DF10S
DF005S1		DF10S1
DF01S		DF10S
DF01S1		DF10S1
DF02S		DF10S
DF02S1		DF10S1
DF04S		DF10S
DF04S1		DF10S1
DF06S		DF10S
DF06S1		DF10S1
DF08S		DF10S
DF08S1		DF10S1
DF10S		DF10S
DF10S1		DF10S1