
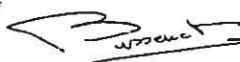

		APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL			Page 1
Component Title: Rectifier Diodes based on types 1N6640U and 1N6642U		Executive Member: CNES			Date: 18/05/2017
					Appl. No. 311C
Components (including series and families) submitted for Extension of Qualification Approval:					1
ESCC COMPONENT NO.	VARIANTS	RANGE OF COMPONENTS	BASED ON	TEST VEHICLE / S	COMPONENT SIMILAR
5101/027	07, 08	LCC2D	1N6640U	33127004YB	
5101/026	07, 08	LCC2D	1N6642U	33125192VZ	
Component Manufacturer STMicroelectronics		Location of Manufacturing Plant(s) 3, rue de Suisse BP4199, 35041 Rennes Cedex		Date of original qualification approval: Date: 02/05/2011 Certificate Ref No. 311	
ESCC Specifications used for Maintenance of qualification testing: Generic: 5000 Issue: 6 Detail(s): 5101/027 Issue: 3 5101/026 Issue: 3		Deviations to LVT testing and Detail Specification used: No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> (supply details in Box 15) Deviation from current Specifications: No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> (Supply details)		Qualification Extension Report reference and date: ID33127004YB_1N6640U01D_ChartF4 - 29/03/2017 ID33125192VZ_1N6642U01D_ChartF4 - 7/12/2015	
Summary of procurement or equivalent test results during current validity period in support of this application (those to ESCC listed first)					
Project Name	Testing Level	LAT	Date code	Quantity Delivered	
Sale details in annex					
PID changes since start of qualification None <input type="checkbox"/> Minor* <input checked="" type="checkbox"/> Major* <input type="checkbox"/> *Provide details in box:			Current PID Verified by: CNES Name of Executive Representative Ref No: 8097046 (generic) Rev16 and 8170379 (specific Diodes switching) rev16 Issue: Date: 12/01/2015 Rev Date:		
Current Manufacturing facilities surveyed by: ESA & CNES on 31/08/2016 (Name of Executive Representative) (Date)					
Satisfactory: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Explain					
Report Reference: CNES DCT_AQ_CQ_2016_13092 (ST-AUDIT-2016)					

	<p align="center">APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL</p> <p>Component title: Rectifier Diodes based on types 1N6640U and 1N6642U</p> <p>Executive Member: CNES Date: 18/05/2017</p>	<p align="center">Page 2</p> <p align="center">Appl. No.</p> <p align="center">311C</p>
<p>Failure Analysis, DPA, NCCS available: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Supply data)</p> <p>Ref. No's and purposes:</p>		
<p>The undersigned hereby certifies on behalf of the ESCC Executive - that the above information is correct; - that the appropriate documentation has been evaluated; - that full compliance to all ESCC requirements is evidence (except as stated in box 15;) - that the reports and data are available at the ESCC Executive and therefore applies on behalf of CNES as the responsible Executive Member for ESCC qualification status to be extended to the component(s) listed herein.</p> <p>Date: 22/05/2017</p> <div style="text-align: right;">  JP. BUSSENOT (Signature of the Executive Coordinator) </div>		
<p>Continuation of Boxes above:</p>		

	APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL Component title: Rectifier Diodes based on types 1N6640U and 1N6642U Executive Member: CNES	Page 3 Appl. No. 311C Date: 18/05/2017
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Non compliance to ESCC requirements: 15

No.:	Specification	Paragraph	Non compliance


Additional tasks required to achieve full compliance for ESCC qualification or rationale for acceptability of noncompliance: 16

Executive Manager Disposition 17

Application Approval: Yes ☐ No ☐

Action / Remarks:

Date:



 Signature, ESA Representative



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ANNEX 1: LIST OF TESTS DONE TO SUPPORT EXTENSION OF QUALIFICATION

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Tests conducted in compliance with:

- ESCC 5000 generic specification; Chart F4 (for ESCC/QPL parts);
- or PID-TFD (for ESCC/QML parts)

Tests vehicle identification/description:

1N6640U01D Lot ID33127004YB DC1623A	Full Chart F4
1N6642U01D Lot ID33125192 DC1524A	Full Chart F4

Detail Specification reference:

Chart F4	Test	Tick when done	Conditions	Date Code Diffusion Lot	Tested Qty	N° of Rejects	Comments if not performed. Comments on Rejection
Environmental/Mechanical Subgroup	Mechanical shock	<input checked="" type="checkbox"/>	MIL-STD-750 TM2016	1623A 1524A	15 + 15	0	
	Vibration	<input checked="" type="checkbox"/>	MIL-STD-750 TM2056	1623A 1524A	15 + 15	0	
	Constant acceleration	<input checked="" type="checkbox"/>	MIL-STD-750 TM2006	1623A 1524A	15 + 15	0	
	Seal Fine leak Gross leak	<input checked="" type="checkbox"/>	MIL-STD-750 TM1071	1623A 1524A	15 + 15	0	
	Electrical Measurement	<input checked="" type="checkbox"/>	Intermediate and End-Point Electrical Measurements	1623A 1524A	15 + 15	0	
	External Visual	<input checked="" type="checkbox"/>	ESCC Basic Spec 20500	1623A 1524A	15 + 15	0	
	Thermal shock	<input type="checkbox"/>	MIL-STD-750 TM1056	Click here to enter text.			Only applicable to axial lead glass diodes
	Temperature Cycling	<input checked="" type="checkbox"/>	MIL-STD-750 TM1051	1623A 1524A	15 + 15	0	
	Moisture Resistance	<input checked="" type="checkbox"/>	MIL-STD-750 TM1021	1623A 1524A	15 + 15	0	
	Seal Fine leak Gross leak	<input checked="" type="checkbox"/>	MIL-STD-750 TM1071	1623A 1524A	15 + 15	0	
	Electrical Measurement	<input checked="" type="checkbox"/>	Intermediate and End-Point Electrical Measurements	1623A 1524A	15 + 15	0	
	External Visual	<input checked="" type="checkbox"/>	ESCC Basic Spec 20500	1623A 1524A	15 + 15	0	
Endurance Subgroup	Operating Life	<input checked="" type="checkbox"/>	ESCC 5000 Para. 8.19	1623A 1524A	15 + 15	0	
	Electrical Measurement	<input checked="" type="checkbox"/>	Intermediate and End-Point Electrical Measurements	1623A 1524A	15 + 15	0	
	Seal Fine leak Gross leak	<input checked="" type="checkbox"/>	MIL-STD-750 TM1071	1623A 1524A	15 + 15	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC Basic Spec 20500	1623A 1524A	15 + 15	0	
Assembly Capability Subgroup	Permanence of Marking	<input type="checkbox"/>	ESCC Basic Spec 24800				Not applicable on Laser marking
	Terminal Strength	<input checked="" type="checkbox"/>	ESCC 5000 Para. 8.18	1623A 1524A	5 + 5	0	
	Internal Visual	<input checked="" type="checkbox"/>	ESCC Basic Spec 20400	1623A 1524A	5 + 5	0	
	Bond Strength	<input checked="" type="checkbox"/>	MIL-STD-750 TM 2037	1623A 1524A	3 + 3	0	
	Die Shear	<input checked="" type="checkbox"/>	MIL-STD-750 TM 2017	1623A 1524A	3 + 3	0	



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Chart F4	Test	Tick when done	Conditions	Date Code Diffusion Lot	Tested Qty	N° of Rejects	Comments if not performed. Comments on Rejection
Additional Tests		<input type="checkbox"/>					
		<input type="checkbox"/>					
		<input type="checkbox"/>					

