

Satisfactory:

Report Reference:

Yes

ESCC-AUD-EXM2017-1

Audit report

No

Explain

### APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL

Component Title: INDUCTORS, FIXED, RF, MINIATURE, MOULDED, SURFACE

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Appl. No. MOUNT, BASED ON SERIES MSCI 10k, 12k, 20k and H01 Executive Member: CNES 19/09/2017 241H Rev.1 1 Components (including series and families) submitted for Extension of Qualification Approval: BASED TEST COMPONENT COMPONENT VARIANTS RANGE OF COMPONENTS VEHICLE / S ON SIMILAR NO. 3201 008 01B See ESCC 3201/008 3201008-02B-1L0K, Series 10K and All other values in the 3201 008 02B 02 12K 3201008-02B-100K. range Series 20K and 3201008-03B-3L3K, 3201 008 03B 03 HO1 3201008-04B-220K 04 05 3201 008 04B 3201 008 05B 2 Component Manufacturer Location of Manufacturing Plant(s) 3 4 Microspire 13, Parc d'activités du Beau Vallon, Date of original qualification approval: F-57110 Illange 01/04/1997 Date: Certificate Ref No. 241 5 6 7 ESCC Specifications used for Deviations to LVT testing and Detail Specification Qualification Extension Report Maintenance of qualification testing: used: reference and date: (supply details in Box 15) Generic: 3201 Issue: No VOQ test report n° 6-05-13 MSCI 2016 M Yes Detail(s): 3201/008 Issue: 6 Deviation from current Specifications: Leadframe supplier qualification report AQ176646 ☐ (Supply details) 8 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 Livraisons µselfs Spatial 07\_2014 to 04\_2016 PID changes since start of qualification 9 Current PID Verified by: CNES 10 None П Name of Excutive Representative Minor\* П Ref No: PID n°41 Issue 4 MSCI inductors Major\*  $\boxtimes$ \*Provide details in box: Date: 14/09/2017 Rev Date: 14/09/2017 11 Current Manufacturing facilities surveyed by: ESA and CNES 12/07/2017 (Name of Executive Representative) (Date)

Component title:

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INDUCTORS, FIXED, RF, MINIATURE, MOULDED, SURFACE MOUNT, BASED ON SERIES MSCI 10k, 12k, 20k and H01 Appl. No. Executive Member: 241H Rev.1 12 Failure Analysis, DPA, NCCS available: (Supply data) Yes No Ref. No's and purposes: 13 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. C DOUCET TOTE Date: 19/09/2017 (Signature of the Executive Coordinator) Continuation of Boxes above: 14 PID evolution : Upload of documents Options of occurrences
Cualification of new leadframe suppliers
Procurement according to the new Generic Specification from September 2017.



Component title:

INDUCTORS, FIXED, RF, MINIATURE, MOULDED, SURFACE MOUNT, BASED ON SERIES MSCI 10k, 12k, 20k and H01

Executive Member: CNES Date: 19/09/20

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		(particular) Stoken to	24	TITINEV.I
Non compl	liance to ESCC requirements:			15
No.:	Specification	Paragraph	Non compliance	
140	Specification	Palagraph	Non compliance	
			1	
			1	
Additional t	tasks required to achieve full compliance for E	ESCC qualification or rationale for acceptability	y of	40
noncomplia	ance:			16
Evecutive	Manager Disposition			
LACCULIVE	wanager Disposition			17
Application	n Approval: Yes □ No □			
Action / Re				
			1/0/1/1	
			4 // X //	
Date:			M 1 0/	
Date.			Signature, ESA Representative	
			orginature, Lon Representative	



Component Title:

INDUCTORS, FIXED, RF, MINIATURE, MOULDED, SURFACE MOUNT, BASED ON SERIES MSCI 10k, 12k, 20k and H01

Executive Member: CNES

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

Tests conducted in compliance with:

ESCC 3201 generic specification; Chart V (for ESCC/QPL parts); Or PID-TFD (for ESCC/QML parts) (for ESCC/QML parts)

Tests vehicle identification/description:

3201008-02B-1L0K	3201008-02B-100K	
3201008-03B-3L3K	3201008-04B-220K	

Detail Specification reference:

3201/008 Issue 5

Chart V	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
Environmental / Mechanical Subgroup (Column 1)	Shock (Specified Pulse)	×	MIL-STD-202	N/A			
	Vibration	$\boxtimes$	MIL-STD-202	N/A			
	Moisture Resistance	$\boxtimes$	MIL-STD-202	1530	12	0	
	External Visual Inspection	×	ESCC 20500	1530	12	0	
	Thermal Shock	$\boxtimes$	MIL-STD-202	1530	12	0	
ianici 12)	Barometric Pressure	$\boxtimes$	MIL-STD-202	1530	12	0	
Mech	Temperature Rise	$\boxtimes$	ESCC 3201, Para. 9.9	1530	12	0	
tal / I p (Cc	Overload	$\boxtimes$	ESCC 3201, Para. 9.10	1530	12	0	
Environmental / Mechanical Subgroup (Column 2)	Electrical Measurements at Room Temperature	⊠	ESCC 3201, Para. 9.3.4	1530	12	0	
	External Visual Inspection	$\boxtimes$	ESCC 20500	1530	12	0	
Endurance Subgroup	Operating Life	×	ESCC 3201, Para. 9.19.2	1530	40	0	
	Electrical Measurements during Endurance Testing	×	ESCC 3201, Para. 9.3.5	1530	40	0	
	External Visual Inspection	$\boxtimes$	ESCC 20500	1530	40	0	
Electrical Subgroup (Electrical Measurements)	Electrical Measurements at High and Low Temperatures	×	ESCC 3201, Para. 9.3.3	1530	12	0	
	Electrical Measurements at Room Temperature	×	ESCC 3201, Para. 9.3.4	1530	12	0	
	External Visual Inspection	×	ESCC 20500	1530	12	0	

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Component title:

INDUCTORS, FIXED, RF, MINIATURE, MOULDED, SURFACE MOUNT, BASED ON SERIES MSCI 10k, 12k, 20k and H01

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Chart V	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed Comments on Rejection
Electrical Subgroup (Ass. / Capab. Tests)	Solderability	⊠	MIL-STD-202	1530	8	0	
	Permanence of Marking	⊠	ESCC 24800	1530	8	0	
	Terminal Strength	×	ESCC 3201, Para. 9.12	1530	8	0	
Additional							



ENTRIES

# APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL

INDUCTORS, FIXED, RF, MINIATURE, MOULDED, SURFACE MOUNT, BASED ON SERIES MSCI 10k, 12k, 20k and H01 Component title:

Executive Member: CNES

Date: 19/09/2017

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# NOTES ON THE COMPLETION OF THE APPLICATION FORM FOR ESCC QUALIFICATION EXTENSION APPROVAL

ENTRIES Form heading	shall indicate: - the title of the component as given in its detail specification or the name of the series, family; - the Executive Member; - the entering date; - the certificate number and its sequential suffix.
Box 1	shall provide details given in the table; in particular there shall be listed: - the variants or range of variants; - the range of components (the ESCC code is recommended to indicate the values or values range, the tolerance, the voltage, etc); the designation given in the detail specification as 'base on'; - under Test Vehicle enter either an ESCC code or the specific characteristic capable of identifying the component tested (e.g., voltage of coil for a relay); - under component similar enter a cross if relevant.
Box 2; 3 and 4	As per QPL entry; otherwise, an explanation of the changes must be supplied.
Box 5	Will show the ESCC Generic and Detail specifications, including issue number and revision letter, current at the time the tests reported were performed. If the specifications are different from those current on the date of the application, see Box 6.
Box 6	Will show the deviations from the Generic and Detail Specifications listed in Box 5, in particular deviations from testing. In case of deviations this must be listed in Box 15. In case the referenced specification in Box 5 have currently a different issue and/or revision indicate also whether the test data deviates or not from such current documents.
Box 7	Must reference the report(s) supplied in support of the application.
Box 8	Should provide the details of procurement to the full ESCC System, documentation of all of which should already have been delivered to the ESCC Executive under the terms of the relevant Generic Specification. An appropriate table has been drawn in this box.
Box 9	If the PID evolved after the Original Qualification or after the last Extension of Qualification, adequate details of such evolution shall be provided together with the reasons for the changes. Major changes shall be clearly marked.
Box 10	Identify the current PID issue status, date and actual date of verification. The date of verification of the current PID should be arranged as close as possible to the required date of extension.
Box 11	This box can be completed only after a physical visit to the plant to confirm that no unexplained changes occurred and that the practices, procedures, material, etc. used in manufacturing the components are as described in the PID. This survey shall be carried out in accordance with the requirements of ESCC Basic Specification No. 20200 and its findings shall be recorded.
Box 12	Provide details of, or reference to, any Destructive Physical Analysis (DPA) and Failure Analysis reports as well as any Nonconformance(s) (NCCS) occurred during the qualification validity period, stating if established corrective action have produced satisfactory results.
Box 13	Enter only the name of the Executive Member (i.e., CNES, DLR, ESTEC, etc.) and the signature of the responsible Executive Coordinator.
Box 14	To be used when there is a need to expand any of the boxes from 1 through 12. Identify box affected and reference the Box 14 in the relevant Box. Box 14 can be broken into 14a, 14b, etc. if several boxes have to be expanded.
Box 15	Fill in Table as requested.
Box 16	Any additional action deemed necessary by the Executive Member to bring the submitted data to a standard likely to be accepted by the ESCC Executive should be listed herein or the reason(s) to accept the noncompliance.
Box 17	All Executive Manager recommendations on the application itself, special conditions or restrictions, modifications of the QPL or QML entry, letters to the manufacturer, etc. shall be entered clearly in Box 19, signed by the representative for ESA, and dated.
Box 18	Fill in Table as requested.
Box 19	Confidential Details of PID changes including those of a confidential nature, shall be provided.
Box 20	State noncompliance with reference to specification(s) and paragraph(s). To simplify reference in Box 16 each nonconformance shall be sequentially numbered. If relevant state 'None'.
Box 21	Any additional action deemed necessary by the Executive Member to bring the submitted data to a standard likely to be accepted by the ESCC Executive should be listed herein or the reason(s) to accept the noncompliance.
Box 22	Additional Comments.