ESCC	APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL Component Title: Capacitors, Fixed, Chip, Ceramic Dielectric, type I, based on types 0805, 1206, 1210, 1812, 2220 Executive Member: CNES Date: 08/06/2023	Page 1 Appl. No. 109R

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
3009 003 - 3009 004	03, 06	See box 14	0805 - - 1210 -	30090030622C0JG 3009003060102FE 3009003060102FE 3009004060103JC 3009004060472FC	
3009 005	03, 06		1812	-	
3009 006	03, 06		2220	-	
3009 022	03, 06		1206	3009022060472JC	

Component Manufacturer 2
AVX France
A division of AVX Corporation

Location of Manufacturing Plant(s) 3
Avenue du Colonel Prat
21850 SAINT APOLLINAIRE – France

4
Date of original qualification approval:
Date: **01/02/1983**
Certificate Ref No. **109**

5
ESCC Specifications used for Maintenance of qualification testing:
Generic: 3009 Issue: 4
Detail(s): 3009/003 Issue: 8
3009/004 7
3009/005 7
3009/006 7

6
Deviations to LVT testing and Detail Specification used:
No ☐ Yes ☒ (supply details in Box 15)
Deviation from current Specifications:
No ☒ Yes ☐ (Supply details)

7
Qualification Extension Report reference and date:
Résultats type 1-VOQ109R.pdf

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	LVT	Date code	Quantity Delivered
ALTER AIRBUS THALES TTI ARROW COMPUTADORAS ...				**2021 : 16051** **2022 : 21569** **2023 (until 04/2023) : 6334**

PID changes since start of qualification 9
None ☐
Minor* ☒
Major* ☐ *Provide details in box: 19

Current **PID** Verified by: **L. Fontaine, CNES** 10
Name of Excutive Representative
Ref No: **1G2 PID 100 21WQ**
Issue: 21 Date **17/09/1981**
Rev Date: **07/04/2023**

11
Current Manufacturing facilities surveyed by: JP Bussenot, CNES on **12/12/2018**
(Name of Executive Representative) **(Date)**
Satisfactory: Yes ☒ No ☐ Explain
Report Reference: CNES/DSO/AQ/CQ-2018.0022759, 18/12/2018

12

Failure Analysis, DPA, NCCS available: Yes ☐ No ☒ (Supply data)

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.

Date: 08/06/2023

Gianandrea Quadri

(Signature of the Executive Coordinator)

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Continuation of Boxes above:

Style	Model	Detail Spec.	Variants	Capacitance Range (pF)	Rated Volt. (V)	Tolerance (±%)	TC (ppm/°C)
0805	A_12C	3009/003	03, 06	4.7 to 9.1 10 to 1 500 1800 to 2200	50, 100 50, 100 50	0.5 pF 1, 2, 5, 10 1, 2, 5, 10	± 30
1206	A_20C	3009/022	03, 06	10 to 3 900 4 700	50, 100 50	1, 2, 5, 10	± 30
1210	A_13C	3009/004	03, 06	22 to 6 800 8 200 to 10 000	50, 100 50	1, 2, 5, 10	± 30
1812	A_14C	3009/005	03, 06	100 to 15 000	50, 100	1, 2, 5, 10	± 30
2220	A_15C	3009/006	03, 06	470 to 33 000	50, 100	1, 2, 5, 10	± 30

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:

B. Schade: Head of the Product Assurance and Safety Department

ANNEX 1: LIST OF TESTS DONE TO SUPPORT EXTENSION OF QUALIFICATION 18

Tests conducted in compliance with:

- ESCC 3009 generic specification; Chart V (for ESCC/QPL parts);
- Or PID-TFD [redacted] (for ESCC/QML parts)

Tests vehicle identification/description:

3009004060103JC DC2140
30090030622C0JG DC2149
3009003060102FE DC2201
3009003060102FE DC2129
3009004060472FC DC2126
3009022060472JC DC2139

Detail Specification reference: 3009/003/004/005/006

Chart F4	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
Environmental / Mechanical Subgroup	Mounting	☒	IEC 60384-1	2140 2149 2201 2129 2126 2139	25 25 25 25 25 25	0	
	Rapid Change of Temperature	☒	IEC 60068-2-14	2140 2149 2201 2129 2126 2139	25 25 25 25 25 25	0	
	Steady State Humidity	☒	ESCC 3009, Para. 8.2	2140 2149 2201 2129 2126 2139	25 25 25 25 25 25	0	1 000 hours
	Visual Inspection	☒	ESCC 3009, Para. 8.5	2140 2149 2201 2129 2126 2139	25 25 25 25 25 25	0	
Endurance Subgroup	Mounting	☒	IEC 60384-1	2140 2149 2201 2129 2126 2139	25 25 25 25 25 25	0	
	Operating Life	☒	ESCC 3009, Para. 8.9	2140 2149 2201 2129 2126 2139	25 25 25 25 25 25	0	2 000 hours
	Electrical Measurements during Endurance Testing	☒	ESCC 3009, Para. 8.9	2140 2149 2201 2129 2126 2139	25 25 25 25 25 25	0	

Electrical Subgroup (Elect. Meas.)	Mounting	☒	IEC 60384-1	2140 2149 2201 2129 2126 2139	6 6 6 6 6 6	0	Before Robustness of Terminations
	Insulation resistance at +125°C	☒	ESCC 3009, Para 8.10	2140 2149 2201 2126 2139	6 6 6 6 6	0	
	Temperature Coefficient (Type I)	☒	ESCC 3009, Para. 8.10	2140 2201 2126 2139	6 6 6 6	0	
	Temperature Characteristic (Type II)	☐	ESCC 3009, Para. 8.10	-	-	-	Not Applicable
	Robustness of Terminations	☒	ESCC 3009, Para 8.7	2140 2149 2201 2129 2126 2139	6 6 6 6 6 6	0	
Assembly Capability Subgroup	Solderability	☒	IEC 60068-2-58 Test Td	2140 2149 2201 2129 2126 2139	10 10 10 10 10 10	0	
	Permanence of Marking	☐	ESCC 24800	-	-	-	Not Applicable
Additional Tests		☐					
		☐					
		☐					

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.