
		APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL			Page 1 Appl. No. 33M
Component Title: Quartz Crystal Units in metal holder T05		Executive Member: CNES			Date: 19/09/2014
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
3501001 , 3501008, 3501011, 3501012, 3501018	All	Frequency Range :15 to 140 MHz	Type T807;	3501 018 C0073 , 48 Mhz ,	All other variants in ESCC 3501001 ESCC 3501008 ESCC 3501011 ESCC 3501012 ESCC 3501018
Component Manufacturer RAKON France		Location of Manufacturing Plant(s) 44 rue de la Glacière BP165 95105 ARGENTEUIL - FRANCE		Date of original qualification approval: Date: 01/10/1976 Certificate Ref No. 33	
ESCC Specifications used for Maintenance of qualification testing: Generic: 3501 Issue: 3 Detail(s): 3501 018 Issue: 5		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: Dossier 4579_VOQ_T807_48Mhz_C0073_DC1342, 04/06/2014	
Summary of procurement or equivalent test results during current validity period in support of this application (those to ESCC listed first)					8
Project Name	Testing Level	LAT	Date code	Quantity Delivered	
Cf. Salleoverview_Mai2011 2-August2014					
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: 3-QLT-005-07 Issue: 07 Date: 09/09/2014 Rev Date: 09/09/2014			
Current Manufacturing facilities surveyed by: CNES & ESA on 21/09/2011 (Name of Executive Representative) (Date)					11
Satisfactory: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Explain					
Report Reference: RAK-AUD-2011					

	<p align="center">APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL</p> <p>Component title: Quartz Crystal Units in metal holder TO5</p> <p>Executive Member: CNES Date: 19/09/2014</p>	<p>Page 2</p> <p>Appl. No. 33M</p>
<p>Failure Analysis, DPA, NCCS available: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (Supply data)</p> <p>Ref. No's and purposes: 2CRAK401 - MRB CLOSED OUT 22-IX-14.</p>		12
<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: 25/09/2014</p> <p align="right"> P.I. Philippe LAY (Head of Components and Qualification Section) For JP.BUSSENOT (Signature of the Executive Representative) _____ (Signature of the Executive Coordinator) </p>		13
<p>Continuation of Boxes above:</p> <p>PID Modification :</p> <ul style="list-style-type: none"> - Upload of FIF - Correction of errors - Add of materials and glue control <p><u>12</u> A) PART OF THE MRB INVESTIGATION, THE RELIABILITY OF RAKON PARTS (DESIGN AND PRODUCTION) COULD BE RE-CONFIRMED AND DEMONSTRATED. AN ISOLATED SINGLE CASE TRIGGERED THE NCCS; THE CAUSE OF FAILURE WAS CONSIDERED TO BE THERMAL / MECHANICAL OVERSTRESS.</p>		14



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Non compliance to ESCC requirements:

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No.:	Specification	Paragraph	Non compliance

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

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THE NON-CONFORMANCE OBJECT OF NCCS, AS REFERENCED IN BOX 12, HAS BEEN MANAGED IN MRBS WITH MANUFACTURERS, USER, CNES AND EJA. THE MRB CONCLUSION TO CLOSE THE NCCS ON 22-1EPT. CONFIRMED A SINGLE ISOLATED FAILURE WITH NO ADDITIONAL RELIABILITY CONCERN FOR DELIVERED PRODUCT NOR DESIGN ROBUSTNESS.

Executive Manager Disposition

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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 3501 generic specification; Chart V (for ESCC/QPL parts);
- Or PID-TFD (for ESCC/QML parts)

Tests vehicle identification/description:

3501 018 C0073 , 48 Mhz , T807

Detail Specification reference:

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	<input checked="" type="checkbox"/>	IEC Publication No. 68-2-27	1342	3	0	
	Vibration	<input checked="" type="checkbox"/>	IEC Publication No. 68-2-6	1342	3	0	
	Seal Test	<input checked="" type="checkbox"/>	IEC Publication No. 68-2-17	1342	3	0	
	Electrical Measurements at Reference Temperature	<input checked="" type="checkbox"/>	Table 2 of the Detail Specification	1342	3	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC Basic Specification No. 20500	1342	3	0	
Environmental/Mechanical Subgroup (Column 2)	Climatic Sequence	<input checked="" type="checkbox"/>	ESCC 3501 Para. 9.14	1342	3	0	
	Rapid Change of Temperature	<input checked="" type="checkbox"/>	IEC Publication No. 68-2-14	1342	3	0	
	Seal Test	<input checked="" type="checkbox"/>	IEC Publication No. 68-2-17	1342	3	0	
	Electrical Measurements at Reference Temperature	<input checked="" type="checkbox"/>	Table 2 of the Detail Specification	1342	3	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC Basic Specification No. 20500	1342			
Endurance Subgroup	Life Test	<input checked="" type="checkbox"/>	ESCC 3501 Para. 9.17	1342	5	0	
	Electrical Measurements during Endurance Testing	<input checked="" type="checkbox"/>	Table 6 of the Detail Specification	1342	5	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC Basic Specification No. 20500	1342	5	0	
Electrical Subgroup - Electr. Meas.	Electrical Measurements at Reference Temperature	<input checked="" type="checkbox"/>	Table 2 of the Detail Specification	1342	3	0	
	Electrical Measurements at High and Low Temperatures	<input checked="" type="checkbox"/>	Table 3 of the Detail Specification	1342	3	0	



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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	<input checked="" type="checkbox"/>	IEC Publication No. 68-2-20	1342	3	0	
	Permanence of Marking	<input checked="" type="checkbox"/>	ESCC Basic Specification No. 24800	1342	3	0	
	Robustness of Terminations	<input checked="" type="checkbox"/>	ESCC 3501 Para. 9.16	1342	3	0	
Additional Tests	FIVE LEAK TEST	<input checked="" type="checkbox"/>	3501 9.5	"	5	0	PERFORMED ON LIFE TEST SAMPLES
		<input type="checkbox"/>					
		<input type="checkbox"/>					(END SUBGROUP)

