	ES	CC
		LL
400	8000	

Component Title:

Quartz Crystal Units in metal holder TO5

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		Exe	ecutive Member:	CNES				D	ate: 05/09/2019		333B	•
Components (includ	ing series and famili	es) sub	omitted for Extension	of Qual	lification	Approval:						_1_
ESCC COMPONENT NO.	VARIANTS		RANGE OF COM	MPONE	NTS		SED		TEST VEHICLE / S	(COMPONENT SIMILAR	Г
3501/018	All		Frequency Range :1	5 to 140	MHz	Туре Т8	307		STC5896 - C0283 STC5889A - C0278	All oth	ner variants	
Component M	lanufacturer	2	Location of Ma	nufactu	ring Plan	t(s)	3					4
RAKON France	·		2 Rue Rober Keller 10 150 Pont Sainte Marie			Date of original qualification approval: Date: 01/09/2015 Certificate Ref No. 333						
		5					6					7
ESCC Specifications Maintenance of qua			Deviations to LVT te used:	esting ar	nd Detail	Specification	оп		ification Extension Repo ence and date:	rt		
Generic: 3501	Issue: 4		No ⊠ Yes		(supply	details in Bo	ox	association for	_T807_51002109-A0 57	0_Dossie	er6270-	
					15)			DC18	312&Dossier6273-DC18	13.pdf (2	9/07/2019)	
Detail(s): 3501/0	18 Issue: 5	- 1	Deviation from curre No ⊠ Yes		ifications: (Supply							
			NO 🗵 Tes		(Supply	uetans)						
			The second secon									8
Summary of procure	ement or equivalent t	est res	W 2 7/20	alidity pe	eriod in s			plication	on (those to ESCC listed	first)		
Project Name	Testing Le	vel	LAT			Date code		_	Quantit	y Deliver	ed	
SalesOverview_Sep mber2017- August2019.xlsx	ite											
				- }								
	41,344											
PID changes since s	start of qualification		9	Curre	ent PID	Verified by:		-	CNES			10
None				100000		tungan managan	CLASSIC CO.		ame of Agency Represe	entative		
Minor* □				Ref N		PID ARG_	PSM	51001			0.00.00	
Major* ⊠	*Provide details in	Ver Treat		Issue		D0			Date	i 2	29/08/2019	
	Relocation of Arge Gennevilliers	enteuil	manufacture to	Revi	Date:	29/08/2019						,
Current Manufacturi	Current Manufacturing facilities surveyed by:			CNES & ESA			on 19/03/2015			5	11	
			(Nam	e of Age	ency Rep	resentative	e)			(Date)		
Satisfactory:	Yes ⊠		No □ Ex	plain								
Report Reference:	RAKPSM-AL annexes	ID-201	5-01 V1									

	APPLICATION	ON FOR EXTE	NSION OF ESCC QUAL	IFICATION	ON APPROVAL	Page	2
ESCC		Appl. No.					
	Executive Member:	CNES		Date:	05/09/2019	333E	
Failure Analysis, DPA, NCCS ava	ilable: Yes	⊠ No	☐ (Supply data)	1NCRI	K901		12
Ref. No's and purposes: 1NCRK901 subcontract - closed	Gold thickness on TO or MICRONOR after th	5 base higher t ey move their a	than specified by RAKOI activity – 2,5µm instead	N resultin of 2µm m	g from insufficient control a ax. on the first batch – not	at their t critical – cor	rected
The undersigned hereby certifies on behalf that the appropriate documentation has bee (except as stated in box 15;) - that the repo	en evaluated; - that full rts and data are availa	compliance to ple at the ESC	all ESCC requirements in Executive and therefore	is evidend	on behalf of	2	13
CNES as the responsible Executive Member	er for ESCC qualification	n status to be	extended to the compon	ent(s) list	ed herein.	Wys eur	
Date: 05/09/2019					JP. BUSSENOT		_
				(Si	gnature of the Executive C	coordinator)	
Continuation of Boxes above: Box 11: Audit of Optical activities in Genner	villiers in April 2018 fur	her to their tran	nsfer from Argenteuil – C	NES me	eting report (CRIM) appen	ded	14
		inor to mon that	iolo, irom / irgonicam c	oneo me	early report (Orthw) appen	ucu	

2	ES	<u>CC</u>
Non com	pliance to ESCC	requirement
No.:		Specification

Component title:

Executive Member:

Quartz Crystal Units in metal holder TO5

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Non compliance	to ESCC requirements:			15
No.:	Specification	Paragraph	Non compliance	
	27			
Additional tasks	required to achieve full compliance for FS	CC qualification or rationale for acceptability	I of	T
noncompliance:	required to defleve full compilation for Eo	CC qualification or rationale for acceptability	OI .	16
Executive Mana	ger Disposition			17
Application App	roval: Yes 🕡 No 🗆			
Action / Remark	And the second s			
			10.	
			3.001	
Date:				270
			B. Schade: Head of ESA Product Assurance and Safety Department	ce



Component Title:

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

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:

STC5896-C0283/39.975000MHz	
STC5889A-C0278/36,000000MHz	

Detail Specification reference:

3501/018

Chart V	Test	Tick when done	Conditions	Date Code	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
E.	Shock	\boxtimes	IEC Publication No. 68-2-27	1813	6	0	
shanica nn 1)	Vibration	\boxtimes	IEC Publication No. 68-2-6	1813	6	0	
al/Med (Colur	Seal Test	×	IEC Publication No. 68-2-17	1813	6	0	
Environmental/Mechanical Subgroup (Column 1)	Electrical Measurements at Reference Temperature	×	Table 2 of the Detail Specification	1813	6	o	
Ш	External Visual Inspection		ESCC Basic Specification No. 20500	1813	6	0	
	Climatic Sequence	\boxtimes	ESCC 3501 Para. 9.14	1813	6	0	
anical n 2)	Rapid Change of Temperature	\boxtimes	IEC Publication No. 68-2-14	1813	6	0	
Colum	Seal Test	×	IEC Publication No. 68-2-17	1813	6	0	
Environmental/Mechanical Subgroup (Column 2)	Electrical Measurements at Reference Temperature	×	Table 2 of the Detail Specification	1813	6	0	
	External Visual Inspection	×	ESCC Basic Specification No. 20500	1813	6	0	
	Life Test	\boxtimes	ESCC 3501 Para. 9.17	1812	5	0	
Endurance Subgroup	Electrical Measurements during Endurance Testing	×	Table 6 of the Detail Specification	1812	5	0	
<u>ロ</u> の	External Visual Inspection	\boxtimes	ESCC Basic Specification No. 20500	1812	5	0	0.0000000000000000000000000000000000000
Electrical Subgroup – Electr. Meas.	Electrical Measurements at Reference Temperature	×	Table 2 of the Detail Specification	1812	3	0	
	Electrical Measurements at High and Low Temperatures	×	Table 3 of the Detail Specification	1812	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		IEC Publication No. 68-2-20	1812	2	0	
	Permanence of Marking		ESCC Basic Specification No. 24800	1812	2	0	
	Robustness of Terminations	×	ESCC 3501 Para. 9.16	1812	2	0	
<u>a</u>							
Additional							
A,							



ENTRIES Form heading

APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL

shall indicate: - the title of the component as given in its detail specification or the name of the series, family; - the Executive Member;

Component title: Quartz Crystal Units in metal holder TO5

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Executive Member:

CNES

Date: 05/09/2019

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

- 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 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.

Confidential Details of PID changes including those of a confidential nature, shall be provided.

by the ESCC Executive should be listed herein or the reason(s) to accept the noncompliance.

State noncompliance with reference to specification(s) and paragraph(s). To simplify reference in Box 16 each nonconformance

Any additional action deemed necessary by the Executive Member to bring the submitted data to a standard likely to be accepted

Box 22 Additional Comments.

Fill in Table as requested.

shall be sequentially numbered. If relevant state 'None'.

Box 18

Box 19

Box 20

Box 21