



APPLICATION FOR EXTENSION OF ESCC PROCESS CAPABILITY APPROVAL

Executive Member: ESA

Date: 17/12/2024

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Appl. No.

343D

Process capability domain submitted for approval

Process capability Domain Description	Process Capability Abstract	Based on Technology	Test Structures	Component Proposed for Qualification
Microwave Hybrid Integrated Circuits (MHIC's), LTCC Low Frequency and LTCC Integral Substrate Package (I.S.P.) Hybrid Integrated Circuits	Attached as Appendix	See appendix	(option 2) (option 1, for LTCC Low Frequency Hybrid)	N.A. (renewal)


Manufacturer: Thales Alenia Space	Location of manufacturing plant(s): Via Gian Domenico Cassini n° 6 67100 L'Aquila, Italy	ESCC Specifications used for Process Capability Approval: ESCC 2566000, Issue 3 (2018)
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Report reference: RQL-01-30-036_A RQL-01-30-037_A RQL-06-20-075_001 RQL-14-50-023_001 RQL-14-60-054_B RQL-14-60-060_A RQL-14-60-061_A RQL-14-60-063_A RQL-14-60-065_A RQL-14-60-066_A RQL-14-60-071_001	PID used for initial Process Capability Approval: Reference No.: Issue: PCP-14-60-013 Revision: G Date: 25-07-2022
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PID Changes since start of Process Capability Approval None <input type="checkbox"/> Minor* <input checked="" type="checkbox"/> * provide details in Box 12 Major* <input type="checkbox"/>	Current PID Verified by: <u>S. Libon, ESA</u> Name of Executive Representative Agency Ref. No.: PCP-14-60-013 Issue: J Date: 16/09/2024
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Current Manufacturing Facilities and Quality System audited by: <u>S. Libon, ESA</u> on 27/06/2024 MoM ESA-TECQES-RP-2024-002463		
Name of Executive Representative Agency	Date	Report Reference Number
Satisfactory: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Corrective Actions Closed Out: Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>		

Quality and Reliability Data	
Evaluation testing performed Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Failure Analysis, DPA, NCCS: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (supply data)
Report Ref. No.: 11 reports (RQL-*) related to the evolution of the PID from rev. G to J have been reviewed and accepted to support the extension of certification.	
Ref. Nos. and purpose: DPA for extension of certification, ref No.: DPA5412, DPA5413, DPA5414	

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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 evidenced except as stated in box 13; that the reports and data are available at the ESCC Executive and therefore applies for ESCC Process capability Approval status to be given to the process capability domain defined herein.

Date: 30/01/2025

Denis
Lacombe

Digitally signed by
Denis Lacombe
Date: 2025.01.30
15:14:31 +01'00'

D. Lacombe. ESA
(Signature of the ESCC Executive Coordinator)

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Continuation of Boxes above:

*Changes detailed in par. 1.1.and 1.2 of PCP-14-60-013 rev. J



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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 Process capability Approval or rationale for acceptability of noncompliance:

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Executive Manager Disposition:


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Application Approval: Yes X No ☐

Action/Remarks:

Date:

B.Schade: Head of the Quality Department

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<p>NOTES ON THE COMPLETION OF THE APPLICATION FOR EXTENSION OF ESCC PROCESS CAPABILITY APPROVAL</p>		
<p>GENERAL</p>	<p>Whenever possible, all entries should be typed and in any case be suitable for legible reproduction by normal means.</p>	
<p>ENTRIES Form heading</p>	<p>shall indicate: - the title of the process capability domain or the technology as given in the Process capability Abstract - the Executive Member; - the entering date; - the serial number and the suffix of the form.</p>	
<p>Box 1</p>	<p>shall provide under process capability domain description the full name or a description statement of the process capability domain – the number of the Process capability Abstract document – the basic technology used for process capability approval – the test structures specification numbers or identification numbers – the components which successfully passed component approval test and are proposed for qualification within the domain. N.B. The process capability abstract shall be attached as an Appendix.</p>	
<p>Box 2 and 3</p>	<p>Manufacturer's name and location of the plant(s) where the process capability domain is situated.</p>	
<p>Box 4</p>	<p>The ESCC Generic and Detail specifications (including issue number and date) used during Process capability Approval.</p>	
<p>Box 5</p>	<p>Reference to test report(s) submitted in support of the application for process capability approval and components proposed for qualification.</p>	
<p>Box 6</p>	<p>Enter details to identify the PID that was applicable at the time of manufacturing of samples for process capability approval testing.</p>	
<p>Box 7</p>	<p>If the PID has been changed during or after process capability approval testing, adequate details shall be provided together with the reasons for change. Major changes shall be clearly identified.</p>	
<p>Box 8</p>	<p>The box serves to identify the current PID and the Executive Representative that has verified it together with the date of this verification.</p>	
<p>Box 9</p>	<p>The box can be completed only after a physical visit to the plant to confirm that the practices, procedures, material, etc. used in manufacturing the components are as described in the PID. This audit shall be carried out in accordance with the requirements of ESCC Basic Specification No. 20200 and the results shall be formally recorded. The report number shall be referenced.</p>	
<p>Box 10</p>	<p>Details entered shall be sufficient to evidenced that an evaluation programme according to ESCC Basic Specification No. 24300 has been performed and that the results thereof are summarised in the audit and test reports. If the evaluation programme has not been carried out according to established ESCC Specifications, the applicant Executive Member shall provide alternative data and declare the assessed degree of satisfactory compliance with the ESCC requirements. Reference shall be made to the reports on Destructive Physical Analysis (DPA), Failure Analysis reports as well as any Non Conformance (NCCS) issued during the Evaluation and/or process capability approval testing.</p>	
<p>Box 11</p>	<p>Enter the name of the Executive Member (i.e., CNES, DLR, ESTEC, etc.) and the signature and date of the responsible Executive Coordinator.</p>	
<p>Box 12</p>	<p>To be used when there is a need to expand any of the boxes from 1 through 10. Identify the Box affected and reference Box 12 in the relevant Box. Box 12 can be broken into 12a, 12b, etc. if several boxes have to be expanded. In the case of Application for the Extension of Process capability Approval, the Box 12 may be used to provide a summary of lots of component types (types, date codes, quantity) manufactured and tested within the process capability domain. Refer to ESCC 24300, paragraph 9.4.3 for complete requirements.</p>	
<p>Box 13</p>	<p>State noncompliance with reference to specification(s) and paragraph(s). To simplify reference in Box 14 each nonconformance shall be sequentially numbered. If relevant state 'None'.</p>	
<p>Box 14</p>	<p>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.</p>	
<p>Box 15</p>	<p>All Executive Manager recommendations on the application itself, special conditions or restrictions, modifications of the ESCC QPL entry, letters to the manufacturer, etc. shall be entered clearly in Box 15, signed by the representative for ESA, and dated.</p>	