Component Title: TRANSISTORS,POWER, MOSFET, N-CHANNEL,BASED ON TYPE BUY **CS***

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		E	xecutive Member:	DLR				D	ate: 23/10/2018	319C	
Components (includ	ing series and famili	es) s	ubmitted for Extension	of Qu	ualification	Approva	ıl:				1
ESCC COMPONENT NO.	COMPONENT VARIANTS			RANGE OF COMPONENTS			BASED ON		TEST VEHICLE / S	COMPONE SIMILAF	
5205/026 5205/027	5205/026 01R							2J01 IA01	BUY25CS45B-01(ES)		
5205/028 5205/030	05/028 01R			į į				2J01 2K01	BUY25CS12J-01(ES)		
Component M Infineon Technologie		2	Location of Ma Am Campeon 1-12 D- 85579 Neubiberg Germany		turing Pla		3	Date Date	of original qualification approve : 28/09/2012 ficate Ref No. 319	al:	4
5 ESCC Specifications used for Maintenance of qualification testing: Generic: 5010 Issue: 03			Deviations to LVT testing and Detail Specification used: No			Qualification Extension Report reference and date: 1808LR20, Issue: Iss. 1, Jun 2018 1808LR23, Issue: Iss. 1, Jun 2018			7		
Summary of procure Project Name	ement or equivalent (No ⊠ Yes esults during current v	□	50 Aug 2	y details) support o		pplication	on (those to ESCC listed first) Quantity Deliv	rered	8
PID changes since I	ast MoQ		9	Cui by:	rrent PID	Verified		_	B. Gökgöz		10
None □ Minor* ⊠ Major* □	*Provide details in	box:		Iss	f No: ue: v Date:	Generic Detail P See abo	ID: ove	Ν	lame of Executive Representat A63500-GEPID-P000, Issue 2 A63500-L5491-P000, Issue 7 Date:	2c, 18.10.2018	
Current Manufacturi	L. Bon (Name	oisch a ora ar	and B. Gö nd F. Mar recutive R	kgöz, DL tinez, ES	R; 4	Or	n 17-18/10/ (Date		11		
Report Reference:	_IFX-AUD-201	8									

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Failure Analysis, DPA, NCCS available:

Yes

(Supply data)

Ref. No's and purposes:

2DIFX01, closed-out in Jan. 2019

2018x801

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 DLR as the responsible Executive Member for ESCC qualification status to be extended to the component(s) listed herein.

Bilank gäligis

Date:

23/10/2018

B. Gökgöz

(Signature of the Executive Coordinator)

Continuation of Boxes above:

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Non compliance to ESCC requirements:					
No.:	Specification	Paragraph	Non compliance		
1	ESCC 5000 iss 7 (july 2017)		issue b used for this Maintenance of Quelification	5	
noncompl	lance:	I ESCC qualification or rationale for acceptability		16	
		of PW has been ap	proved		
	Manager Disposition			17	
Application Action / R	n Approval: Yes				

31.1.2019

Signature ESA: B. Schade, Head of Product Assurance and Safety Department



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

Tests conducted in compliance with:

ESCC 5010 generic specification; Chart V (for ESCC/QPL parts);

Tests vehicle identification/description:

1808LR20	BUY25CS45B-01(ES), EndSG, AssCapSG f. TO packages, 1747B
1808LR23	BUY25CS12J-01(ES), EnvMechSG f. SMD packages, 1748C

Detail Specification reference: 5205/026 and 5205/030

Chart F4A	Test	Tick when done	Conditions	Date Code Diffusion Lot	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
Neg Still	Shock Test	×	MIL-STD-750 Test Method 2016	1748C	18	0	
	Vibration Test	⊠	MIL-STD-750 Test Method 2056	1748C	18	0	
	Constant Acceleration	⊠	MIL-STD-750 Test Method 2006	1748C	18	0	
တ္	Seal Test (Fine and Gross Leak)	×	MIL-STD-883, Test Method 1014, Test Condition A1 or A2	1748C	18	0	acc. Detail Spec
Subgroul	Electrical Measurements at Room Temp.	×	Table 2 of the Detail Specification	1748C	18	0	
Environmental/Mechanical Subgroups	External Visual Inspection	⊠	ESCC Basic Specification No. 20500	1748C	18	0	
	Temperature Cycling	×	MIL-STD-883 Test Method 1010, Test Condition C, 20 cycles	1748C	18	0	acc. Detail Spec
	Moisture Resistance	×	MIL-STD-750 Test Method 1021	1748C	18	0	
	Seal Test (Fine and Gross Leak)	×	MIL-STD-750 Test Method 1071	1748C	18	0	
	Electrical Measurements at Room Temp.	×	Table 2 of the Detail Specification	1748C	18	0	
	External Visual Inspection	×	ESCC Basic Specification No. 20500	1748C	18	0	
Endurance Subgroup	Operating Life	×	MIL-STD-750 Test Method 1026	1747B	16	0	
	Electrical Measurements during Endur. Test	⊠	Table 6 of the Detail Specification	1747B	16	0	
	External Visual Inspection	×	ESCC Basic Specification No. 20500	1747B	16	0	



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Chart F4A	Test	Tick when done	Conditions	Date Code Diffusion Lot	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
Assembly Capability Tests	Solderability Test		MIL-STD-750 Test Method 2026				n.a. acc. Detail Spec
	Permanence of Marking	×	ESCC Basic Specification No. 24800	1747B	6	0	
	Terminal Strength		MIL-STD-750 Test Method 2036	1747B	6	0	
De- encapsulation Tests	Internal visual inspection	×	ESCC Basic Specification No. 20400	1747B	6	0	
	Bond Strength	×	MIL-STD-750 Test Method 2037	1747B	6	0	
	Die Shear		MIL-STD-750 Test Method 2017	1747B	6	0	



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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.