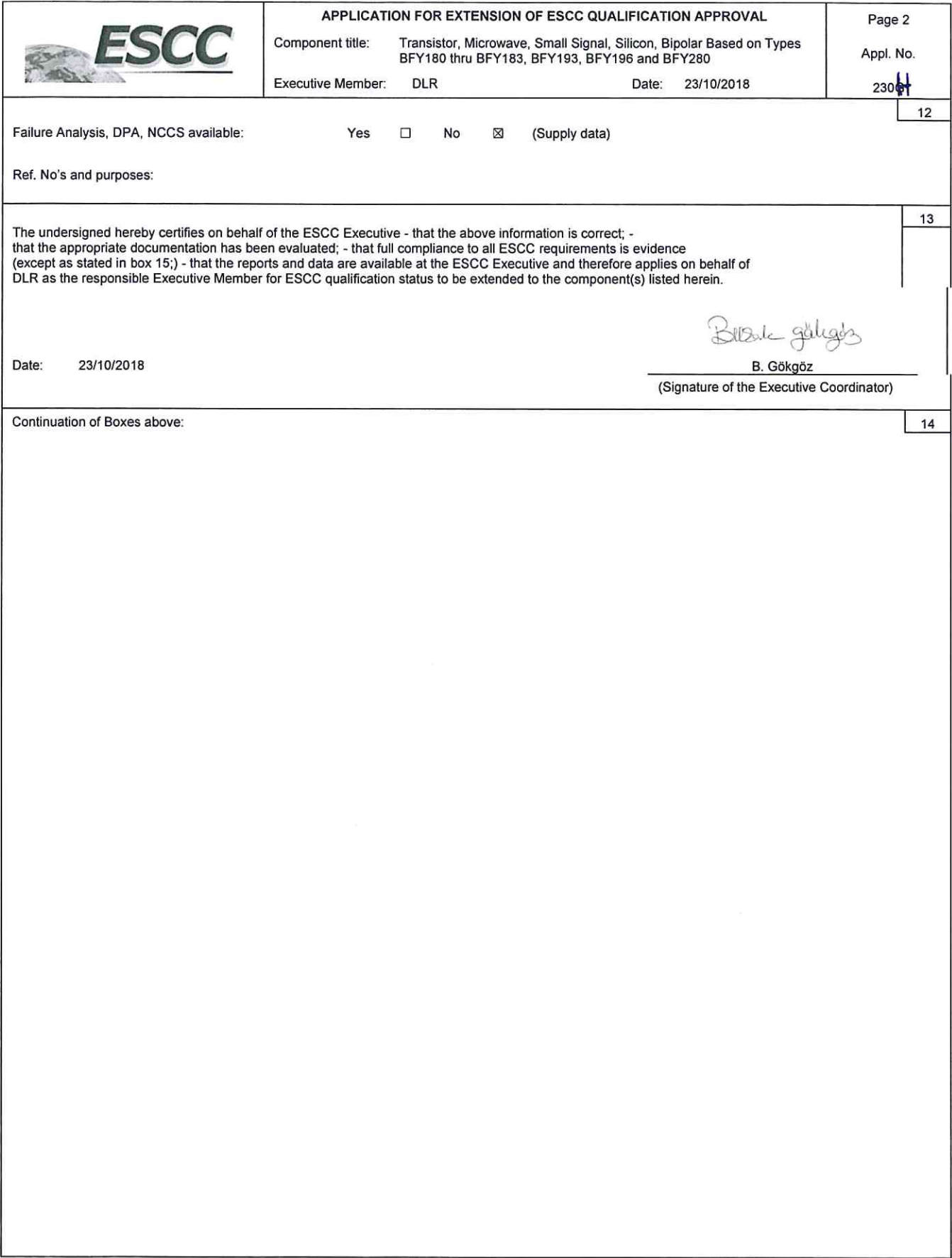


		APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL				Page 1 Appl. No. 2304	
Component Title: Transistor, Microwave, Small Signal, Silicon, Bipolar Based on Types BFY180 thru BFY183, BFY193, BFY196 and BFY280		Executive Member: DLR				Date: 23/10/2018	
Components (including series and families) submitted for Extension of Qualification Approval:							1
ESCC COMPONENT NO.	VARIANTS	RANGE OF COMPONENTS	BASED ON	TEST VEHICLE / S	COMPONENT SIMILAR		
5611/006	01 to 08		BFY180 BFY280 BFY181 BFY182 BFY183 BFY193 BFY196	BFY640-04(ES) <i>(see MoQ cert. 322c)</i>	CFY67		
Component Manufacturer Infineon Technologies AG		Location of Manufacturing Plant(s) Am Campeon 1-12 D- 85579 Neubiberg Germany		Date of original qualification approval: Date: 01/06/1996 Certificate Ref No. 230			
ESCC Specifications used for Maintenance of qualification testing: Generic: 5010 Issue: 02 Detail(s): 5611/009 Issue: 02 5613/004 Issue: 02		Deviations to LVT testing and Detail Specification used: No <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> (supply details in Box 15) Deviation from current Specifications: No <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> (supply details)		Qualification Extension Report reference and date: 1814LR10, Iss 1, April 2018 1814LR11, Iss 1, April 2018			
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	LAT	Date code	Quantity Delivered			
PID changes since last MoQ None <input type="checkbox"/> Minor* <input checked="" type="checkbox"/> Major* <input type="checkbox"/>		Current PID Verified by: B. Gökgöz		Name of Executive Representative A63500-GEPID-P000, Issue 2c, 18.10.2018 A63500-T359-P000, Issue 4a, 18.10.2018			
*Provide details in box: See Detail PID		Ref No: Generic PID: Detail PID: Issue: See above Rev Date: 26/10/2018		Date: See above			
Current Manufacturing facilities surveyed by: T. Kaupisch on 17-18/10/2018 (Name of Executive Representative) (Date)							
Satisfactory: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Explain							
Report Reference: IFX-AUD-2018							



		APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL		Page 3 Appl. No. 23061
		Component title: Transistor, Microwave, Small Signal, Silicon, Bipolar Based on Types BFY180 thru BFY183, BFY193, BFY196 and BFY280		
		Executive Member: DLR		Date: 23/10/2018
Non compliance to ESCC requirements:				15
No.:	Specification	Paragraph	Non compliance	
1	ESCC 5010	CHART F4A	No periodic repetition of Endurance Subgroup	
2	ESCC 5010 ISSUES 3 (APRIL 2017)		ISS 2 USED FOR MAINTENANCE OF QUALIFICATION.	
Additional tasks required to achieve full compliance for ESCC qualification or rationale for acceptability of noncompliance:				16
The approved Detail PIDs describe the agreed methodology for maintenance of qualification regarding similarity in § 7 REVISED PID APPROVED IN OCT. 2018				
Executive Manager Disposition				17
Application Approval: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				
Action / Remarks:				
Date:				
 Signature of ESA Head of Product Assurance and Safety Department				



APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL

Component Title: Transistor, Microwave, Small Signal, Silicon, Bipolar Based on Types
BFY180 thru BFY183, BFY193, BFY196 and BFY280

Executive Member: DLR Date: 23/10/2018

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

18

Tests conducted in compliance with:

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

Tests vehicle identification/description:

1814LR10	BFY640-04(ES), EnvMechSG, AssCapSG, DecapSG, 1709A
1814LR11	CFY67-08(ES), AssCapSG, 1632A

Detail Specification reference: 5613/004 and 5611/009

Chart F4A	Test	Tick when done	Conditions	Date Code Diffusion Lot	Tested Qty	No. of Rejects	Comments if not performed. Comments on Rejection
Environmental/Mechanical Subgroups	Thermal Shock Test	<input checked="" type="checkbox"/>	MIL-STD-202 Test Method 107 Test Condition B, 100 cycle	1709A	10	0	acc. Detail Spec
	Shock Test	<input type="checkbox"/>	MIL-STD-750 Test Method 2016				n.a. acc. Detail Spec
	Vibration Test	<input type="checkbox"/>	MIL-STD-750 Test Method 2056				n.a. acc. Detail Spec
	Constant Acceleration	<input type="checkbox"/>	MIL-STD-750 Test Method 2006				n.a. acc. Detail Spec
	Seal Test (Fine and Gross Leak)	<input checked="" type="checkbox"/>	MIL-STD-750 Test Method 1071	1709A	10	0	
	Moisture Resistance	<input checked="" type="checkbox"/>	MIL-STD-750 Test Method 1021	1709A	10	0	
	Electrical Measurements at Room Temp.	<input checked="" type="checkbox"/>	Table 2 of the Detail Specification	1709A	10	0	
	External Visual Inspection	<input checked="" type="checkbox"/>	ESCC Basic Specification No. 20500	1709A	10	0	
Endurance Subgroup*	Operating Life	<input type="checkbox"/>	MIL-STD-750 Test Method 1026				Former data from Wafer available
	Electrical Measurements during Endur. Test	<input type="checkbox"/>	Table 6 of the Detail Specification				Former data from Wafer available
	External Visual Inspection	<input type="checkbox"/>	ESCC Basic Specification No. 20500				Former data from Wafer available

* LAT1 on actual wafer was performed satisfactorily on Assembly Lot: 1008.1 with Date Code: 1015A



APPLICATION FOR EXTENSION OF ESCC QUALIFICATION APPROVAL

Component title: Transistor, Microwave, Small Signal, Silicon, Bipolar Based on Types
BFY180 thru BFY183, BFY193, BFY196 and BFY280

Executive Member: DLR

Date: 23/10/2018

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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	<input checked="" type="checkbox"/>	MIL-STD-750 Test Method 2026	1632A	2 4	0 0	
	Permanence of Marking	<input checked="" type="checkbox"/>	ESCC Basic Specification No. 24800	1632A	2 4	0 0	
	Terminal Strength	<input checked="" type="checkbox"/>	MIL-STD-750 Test Method 2036	1632A	2 4	0 0	
De- encapsulation Tests	Internal visual inspection	<input checked="" type="checkbox"/>	ESCC Basic Specification No. 20400	1632A 1709A	2 6	0 0	
	Bond Strength	<input checked="" type="checkbox"/>	MIL-STD-750 Test Method 2037	1632A 1709A	2 6	0 0	
	Die Shear	<input checked="" type="checkbox"/>	MIL-STD-750 Test Method 2017	1632A 1709A	2 6	0 0	

