



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D * : Required Field

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2019-01-25
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Antonella Lanzafame	Representative Title	AMS MD CHAMPION
Representative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/support.html		

Uncertainty Statement

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Legal Statement			
Supplier Acceptance *	true	Legal Declaration *	Standard

Legal Statement

Supplier certifies that it gathered the provided information and such information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form. Supplier acknowledges that Company will rely on this certification in determining the compliance of its products. Company acknowledges that Supplier may have relied on information provided by others in completing this form, and that Supplier may not have independently verified such information. However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part(s), and those certifications are at least as comprehensive as the certification in this paragraph. If the Company and the Supplier enter into a written agreement with respect to the identified part(s), the terms and conditions of that agreement, including any warranty rights and/or remedies provided as part of that agreement, will be the sole and exclusive source of the Supplier's liability and the Company's remedies for issues that arise regarding information the Supplier provides in this form.

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
HCC4093BKT	63J3*P93BHW2	A	RN1A	2019-01-25
Amount	UoM	Unit type	ST ECOPACK Grade	
480.00	mg	Each	Non ECOPACK®	
Comment	non ROHS compliant device			

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
Not Applicable	Not Applicable	Not Applicable		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Sn63 Tin/Lead (Sn63Pb37)	Not Applicable	Kovar		



Package Designator	Size	Nbr of instances	Shape	
SOF	6.91x9.95	14	flat	
Comment	Package: B0RK FLAT14 ESA FP			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	true
2 - Product(s) meets EU RoHS requirements except lead in solder and this usage may qualify under the lead in solder '7b' exemption (other selected exemptions may apply)	false
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Exemption Id.	Description

Query : California Prop65 list, dated 14 August 2015			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			TRUE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			FALSE
Substance	amount in product (mg)	Application	ppm in product
Nickel	56.21	frame	117098

QueryList : REACH-27th Jun 2018				
Query				Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
4-Nonylphenol, branched and linear	1000 ppm	0.011	glue	22

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	63J3*P93BHW2						
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)	
Die	Other inorganic materials	1.229	mg	supplier	die	Silicon (Si)	7440-21-3		1.203	mg	978845	2506	
				supplier	metallization	Aluminium (Al)	7429-90-5		0.004	mg	3255	8	
				supplier	Passivation	Silicon Oxide	7631-86-9		0.008	mg	6509	17	
				supplier	polymer die coating	PIX1 Polyimide	108-65-6		0.014	mg	11391	29	
				supplier	alloy	Iron (Fe)	7439-89-6		22.157	mg	629818	46160	
				supplier	alloy	Phosphorus (P)	12185-10-3		0.013	mg	370	27	
Die attach	Other Organic Materials	0.340	mg	supplier	alloy	Nickel (Ni)	7440-02-0		13.010	mg	369812	27104	
				supplier	glue	Silver (Ag)	7440-22-4		0.284	mg	835294	592	
				supplier	glue	4,4'-ethylenediphenyl dicyanate	47073-92-7		0.051	mg	150000	106	
					SVHC	glue	4-Nonylphenol	84852-15-3		0.005	mg	14706	10
				supplier	wire	Aluminium (Al)	7429-90-5		0.059	mg	983333	123	
				supplier	wire	Silicium (Si)	7440-21-3		0.001	mg	16667	2	
Lid Preform	Other inorganic materials	0.173	mg	supplier	resin	Gold (Au)	7440-57-5		0.138	mg	797688	288	
				supplier	resin	Tin (Sn)	7440-31-5		0.035	mg	202312	73	
connections coating	Solder	4.384	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.762	mg	630018	5754	
				JIG - R	solder alloy	Lead (Pb)	7439-92-1		1.622	mg	369982	3379	
Base	Other inorganic materials	414.939	mg	supplier	cavity	Aluminum oxide	1344-28-1		264.997	mg	638641	552077	
				supplier	cavity	Iron (Fe)	7439-89-6		52.750	mg	127127	109896	
				supplier	cavity	Nickel (Ni)	7440-02-0		43.197	mg	104104	89994	
				supplier	cavity	glass	60676-86-0		22.429	mg	54054	46727	
				supplier	cavity	Gold (Au)	7440-57-5		10.799	mg	26026	22498	
				supplier	cavity	Tungsten (W)	7440-33-7		10.384	mg	25025	21633	
				supplier	cavity	Chromium oxide	1308-38-9		4.569	mg	11011	9519	
				supplier	cavity	Silver (Ag)	7440-22-4		2.907	mg	7006	6056	
				supplier	cavity	Cobalt (Co)	7440-48-4		2.492	mg	6006	5192	
supplier	cavity	Molybdenum (Mo)	7439-98-7		0.415	mg	1000	865					
Lid	Other inorganic materials	23.695	mg	supplier	lid	Iron (Fe)	1344-28-1		12.440	mg	525005	25917	
				supplier	lid	Nickel (Ni)	7439-89-6		7.582	mg	319983	15796	
				supplier	lid	Cobalt (Co)	7440-02-0		3.436	mg	145009	7158	
				supplier	lid	Gold (Au)	60676-86-0		0.237	mg	10002	494	