



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-01-15
Company Unique ID			
Contact Name *	Refer to Supplier comment section	Contact Title	Refer to Supplier comment section
Contact Phone *	Refer to Supplier comment section	Contact Email *	Refer to Supplier comment section
Authorized Representative *	Giovanni Giacopello	Representative Title	ADG Material Declaration 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
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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
BALF-NRF01J5	KEAZ*BLFNR1A	A	SH1A	2018-01-15
	Amount	UoM	Unit type	ST ECOPACK Grade
	0.631	mg	Each	ECOPACK* 2

Manufacturing information			
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	
Not Applicable	260	3	
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment
Tin/Silver/Copper (SAC305)	Tin/Silver/Copper (Sn/Ag/Cu)	Copper Alloy	



Package Designator	Size	Nbr of instances	Shape
BGA	1.37 - 0.84 - 0.2	5	bulk solder
Comment	Package: CSPS0.2 SP 4-81		

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 27th January 2017			
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

QueryList : REACH- 12th January 2017				
Query	Response			
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH	TRUE			
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Homogeneous Material above the limits per the definition within REACH	TRUE			
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Homogeneous Material (mg)	Application - Homogeneous Material	ppm in Homogeneous Material

Material Composition Declaration						Mfr Item Name	KEAZ*BLFNRLA					
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	0.552	mg	supplier	die	Silicon (Si)	7440-21-3		0.398	mg	721014	630745
				supplier	metallisation	Aluminium (Al)	7429-90-5		0.003	mg	5435	4752
				supplier	metallisation	Copper (Cu)	7440-50-8		0.077	mg	139493	122029
				supplier	metallisation	Tantalum (Ta)	7440-25-7		0.005	mg	9058	7924
				supplier	die glass coating	Borosilicate glass	65997-17-3		0.058	mg	105072	91918
				supplier	die glass coating	Glass: Silicon Dioxide	7631-86-9		0.005	mg	9058	7924
				supplier	die polymer coat	PBO polybenzoxazol	29791-96-6		0.006	mg	10870	9509
				supplier	solder alloy	Tin (Sn)	7440-31-5		0.077	mg	974684	122029
solder balls	Solder	0.079	mg	supplier	solder alloy	Silver (Ag)	7440-22-4		0.002	mg	25316	3170