



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2016-10-14
Contact Name *	Refer to Supplier comment section	Contact Title	Refer to Supplier comment section
Authorized Representative *	Floriana San Biagio	Representative Title	AMG 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

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
	22BB*AU10BCA	A	MA1A	2016-10-14
Amount	UoM	Unit type	ST ECOPACK Grade	
37.0	mg	Each	ECOPACK® 2	
Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant			

Manufacturing information			
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	
3	260	3	
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment
Not Applicable ; if coating is used c	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy	



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Package Designator	Size	Nbr of instances	Shape
LGA	4x4x1	16	No lead
Comment	Package: A0CZ LLGA 4x4x1.1 16L Pitch 0.65; MDF valid for I3G4250DTR		

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	FALSE
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)	TRUE
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Exemption Id.	Description
7c-1	7c-1-Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound

QueryList : REACH-20th June 2016				
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

Material Composition Declaration						Mfr Item Name	22BB*AU10BCA		27 (max)		30 (max)	30 (max)
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Dies	Other inorganic materials	14.671	mg	supplier	die	Silicon (Si)	7440-21-3		13.485	mg	919160	364459
				supplier	metallisation	Aluminium (Al)	7429-90-5		0.032	mg	2181	865
				supplier	metallisation	Copper (Cu)	7440-50-8		0.056	mg	3817	1514
				supplier	metallisation	Tantalum (Ta)	7440-25-7		0.011	mg	750	297
				supplier	metallisation	Titanium (Ti)	7440-32-6		0.006	mg	409	162
				supplier	metallisation	Tungsten (W)	7440-33-7		0.001	mg	68	27
				supplier	Passivation	Silicon Nitride (SiN)	12033-89-5		0.022	mg	1500	595
				supplier	passivation	Silicon Oxide	7631-86-9		0.514	mg	35035	13892
				JIG - R	die glass coating	Lead-Borate Glass	65997-18-4	7c-I-Electrical and electro	0.544	mg	37080	14703
				Substrate	Other Organic Materials	10.051	mg	supplier	core material	Bismaleimide (B)	105391-33-1	
supplier	core material	Triazine (T)	25722-66-1						0.454	mg	45170	12270
supplier	core material	Fiber glass	65997-17-3						1.355	mg	134812	36622
supplier	core material	Thermosetting resin	54208-63-8						0.761	mg	75714	20568
supplier	core material	metal hydroxide	21645-51-2						0.031	mg	3084	838
supplier	core material	Calcium sulfate	7778-18-9						0.015	mg	1492	405
supplier	core material	Zinc hydroxide	20427-58-1						0.009	mg	895	243
supplier	metallisation	Copper (Cu)	7440-50-8						6.851	mg	681624	185162
supplier	metallisation	Nickel (Ni)	7440-02-0						0.107	mg	10646	2892
supplier	metallisation	Gold (Au)	7440-57-5						0.014	mg	1393	378
Die attach	Other Organic Materials	0.473	mg	supplier	tape	epoxy resin	25068-38-6		0.298	mg	630021	8054
				supplier	tape	Polypropylene	9003-07-0		0.009	mg	19027	243
				supplier	tape	epoxy resin	29690-82-2		0.047	mg	99366	1270
				supplier	tape	propenoate polymer	538311-13-6		0.095	mg	200846	2568
				supplier	tape	Diphenol Propane Diglycidyl Ether	1675-54-3		0.024	mg	50740	649
Bonding wire	Precious metals	0.177	mg	supplier	wire	Gold (Au)	7440-57-5		0.175	mg	988701	4730
				supplier	wire	Palladium (Pd)	7440-05-3		0.002	mg	11299	54
encapsulation	Other Organic Materials	11.628	mg	supplier	mold compound	Silica, vitreous	60676-86-0		10.064	mg	865497	272000
				supplier	mold compound	Epoxy Resin	85954-11-6		0.465	mg	39990	12568
				supplier	mold compound	Phenol Resin	26834-02-6		0.465	mg	39990	12568
				supplier	mold compound	Epoxyde Bisphenol A Resin	25068-38-6		0.349	mg	30014	9432
				supplier	mold compound	Aluminium hydroxyde	21645-51-2		0.233	mg	20038	6297
supplier	mold compound	Carbon black	1333-86-4		0.052	mg	4472	1405				