



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2017-04-18
Contact Name *	Refer to Supplier Comment section	Representative Title	Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	Representative Email *	ADG 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
STA8090EXGATR	A0Y8*V839BDX	A	ZR1A	2017-04-18
	Amount	UoM	Unit type	ST ECOPACK Grade
	172.40	mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
BGA	9x9x1.2	169	flat	
Comment	Package: TFBGA 95Q1.2 169 F13X13 P.65B.35			

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
5 - Product(s) is obsolete, no information is available	false
6 - Product(s) is unknown, no information is available	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			FALSE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			TRUE
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.71	die metal-substrate-solder balls	4107

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

Material Composition Declaration						Mfr Item Name	A0Y8*V839BDX					
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	4.375	mg	supplier	die	Silicon (Si)	7440-21-3		3.520	mg	804571	20418
				supplier	metallization	Aluminium (Al)	7429-90-5		0.030	mg	6857	174
				supplier	metallization	Copper (Cu)	7440-50-8		0.179	mg	40914	1038
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.456	mg	104229	2645
				supplier	metallization	Titanium (Ti)	7440-32-6		0.008	mg	1829	46
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	229	6
				supplier	metallization	Nickel (Ni)	7440-02-0		0.001	mg	229	6
				supplier	Passivation	Silicon Nitride	12033-89-5		0.041	mg	9371	238
				supplier	Passivation	Silicon Oxide	7631-86-9		0.139	mg	31771	806
				supplier	substrate	Continuous filament fiber glass	65997-17-3		6.958	mg	119999	40360
Substrate (BT-core)	Other organic materials	57.984	mg	supplier	substrate	Epoxy	7328-97-4		5.798	mg	99993	33631
				supplier	substrate	Flame Resistant Epoxy Resin	68541-56-0		4.059	mg	70002	23544
				supplier	substrate	Proprietary			5.219	mg	90008	30273
				supplier	substrate	Inorganic Filler	21645-51-2		14.496	mg	250000	84084
				supplier	substrate	Copper (Cu)	7440-50-8		20.295	mg	350010	117720
				supplier	substrate	Nickel (Ni)	7440-02-0		0.696	mg	12003	4037
				supplier	substrate	Gold(Au)	7440-57-5		0.463	mg	7985	2686
				supplier	substrate	Talc containing no asbestiform fiber	14807-96-6		0.339	mg	99823	1966
Substrate (solder mask)	Other organic materials	3.396	mg	supplier	solder mask	Morpholine derivative	Proprietary		0.479	mg	141048	2778
				supplier	solder mask	Barium Sulfate	7727-43-7		1.495	mg	440224	8672
				supplier	solder mask	Silica, amorphous	7631-86-9		0.166	mg	48881	963
				supplier	solder mask	Dipropylene glycol monomethyl ether	34590-94-8		0.917	mg	270024	5319
				supplier	solder mask	Modified epoxy resin	25068-38-6		0.237	mg	565632	1375
Die Attach	Other organic materials	0.419	mg	supplier	glue	Epoxy resin Dapsone	80-08-0		0.109	mg	260143	632
				supplier	glue	Treated fumed silica	67762-90-7		0.018	mg	42959	104
				supplier	glue	Substituted silane	Proprietary		0.022	mg	52506	128
				supplier	glue	Elastomeric polymer	Proprietary		0.019	mg	45346	110
				supplier	glue	Epoxy resin	25068-38-6		0.014	mg	33414	81
Bonding wire	Other inorganic materials	1.350	mg	supplier	wire	Gold (Au)	7440-57-5		1.337	mg	990370	7755
				supplier	wire	Palladium(Pd)	7440-05-3		0.013	mg	9630	75
Solder balls	Solder	22.073	mg	supplier	solder	Tin (Sn)	7440-31-5		21.687	mg	982513	125795
				supplier	solder	Silver (Ag)	7440-22-4		0.265	mg	12006	1537
				supplier	solder	Copper (Cu)	7440-50-8		0.110	mg	4983	638
Encapsulation	Other organic materials	82.803	mg	supplier	solder	Nickel(Ni)	7440-02-0		0.011	mg	498	64
				supplier	mold compound	Silica(fused)	60676-86-0		71.211	mg	860005	413057
				supplier	mold compound	Epoxy resin	25068-38-6		7.949	mg	95999	46108
				supplier	mold compound	Phenol resin	29690-82-2		3.312	mg	39999	19211
				supplier	mold compound	Carbon black	1333-86-4		0.331	mg	3997	1920