



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 *	31/3/2016
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 *	Emilio Castelli	Representative Title	APG 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
STA8058	KCQS*MV49BEX	A	MU1A	31/3/2016
Amount		UoM	Unit type	ST ECOPACK Grade
196.7		mg	Each	ECOPACK® 1

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	
Tin/Silver/Copper (SAC125)	NAC	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
BGA	11x7x1.4	104	flat	
Comment				

QueryList : ROHS directive 2011/65/EU _ANNEX IV	
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

QueryList : REACH-16th June 2014				
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	KCQS*MV49BEX									
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)				
Die or Dies or Wafer (choose)	Other inorganic materials	33.323	mg	supplier	die	Silicon (Si)	7440-21-3		32.297	mg	969210	164194				
				supplier	metallisation	Aluminium (Al)	7429-90-5		0.147	mg	4411	747				
				supplier	metallisation	Cobalt (Co)	7440-48-4		0.003	mg	90	15				
				supplier	metallisation	Titanium (Ti)	7440-32-6		0.034	mg	1020	173				
				supplier	metallisation	Tungsten (W)	7440-33-7		0.027	mg	810	137				
				supplier	passivation	Silicon Nitride (SiN)	12033-89-5		0.075	mg	2251	381				
				supplier	passivation	Silicon Oxide	7631-86-9		0.652	mg	19566	3315				
				supplier	die polymer coating	PIX1 Gamma-butyrolactone	96-48-0		0.088	mg	2641	447				
				substrate	Other Organic Materials	57.410	mg	supplier	core material	Fiber glass	65997-17-3		15.727	mg	273942	79954
								supplier	core material	Epoxy Cresol Novolak	29690-82-2		3.658	mg	63717	18597
								supplier	core material	epoxy resin	25068-38-6		3.658	mg	63717	18597
								JIG - I	core material	Brominated compound	68541-56-0		2.560	mg	44592	13015
supplier	core material	Bismaleimide (B)	13676-54-5						5.303	mg	92371	26960				
supplier	core material	Triazine (T)	25722-66-1						5.303	mg	92371	26960				
supplier	core material	Magnesium silicate	13776-74-4						0.183	mg	3188	930				
supplier	core material	Amorphous Silica	7631-86-9						0.183	mg	3188	930				
supplier	Solder mask	Baryum sulfate	7727-43-7						1.002	mg	17453	5094				
supplier	Solder mask	Dipropylene glycol monomethyl	34590-94-8						0.100	mg	1742	508				
supplier	Solder mask	Talc containing no asbestiform fibers	14807-96-6						0.315	mg	5487	1601				
supplier	Solder mask	Silica crystalline	14808-60-7						0.045	mg	784	229				
supplier	Solder mask	2-(2-Ethoxyethoxy)ethyl Acetate	112-15-2		4.206	mg	73262	21383								
supplier	Solder mask	Acrylates derivative	407-47-6		4.306	mg	75004	21891								
supplier	Solder mask	amine compound	trade secret		0.040	mg	697	203								
supplier	metallisation	Copper (Cu)	7440-50-8		9.087	mg	158283	46197								
supplier	metallisation	Nickel (Ni)	7440-02-0		1.536	mg	26755	7809								
supplier	metallisation	Gold (Au)	7440-57-5		0.198	mg	3449	1007								
Die attach		2.764	mg	supplier	glue or tape (choose)	Neopentyl glycol dimethacrylate	1985-51-9		0.221	mg	79957	1124				
				supplier	glue or tape	2,6-Diglycidyl phenyl allyl ether	EC 417-470-1		0.205	mg	74168	1042				
				supplier	glue or tape	Epoxyde Bisphenol A Resin	25068-38-6		0.011	mg	3980	56				
				supplier	glue or tape	Tetrafluoroethylene	9002-84-0		0.003	mg	1085	15				
				supplier	glue or tape	epoxy resin	na		0.666	mg	240955	3386				
				supplier	glue or tape	Silica, vitreous	60676-86-0		1.658	mg	599855	8429				
Bonding wire		0.979	mg	supplier	wire	Gold (Au)	7440-57-5		0.979	mg	1000000	4977				
encapsulation		70.441	mg	supplier	mold compound	Biphenyl epoxy resin	85954-11-6		7.044	mg	99999	35811				
				supplier	mold compound	Phenol resin	205830-20-2		3.522	mg	49999	17905				
				supplier	mold compound	Quartz	14808-60-7		1.761	mg	25000	8953				
				supplier	mold compound	Silica, vitreous	60676-86-0		57.409	mg	814994	291861				
				supplier	mold compound	Carbon Black	1333-86-4		0.634	mg	9000	3223				
				supplier	mold compound	Magnesium dihydroxide	1309-42-8		0.071	mg	1008	361				
solder balls	Solder	31.783	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		31.230	mg	982601	158770				
				supplier	solder alloy	Silver (Ag)	7440-22-4		0.381	mg	11988	1937				
				supplier	solder alloy	Copper (Cu)	7440-50-8		0.159	mg	5003	808				
				supplier	solder alloy	Nickel (Ni)	7440-02-0		0.010	mg	315	51				
				JIG - R	solder alloy	Lead (Pb)	7439-92-1		0.003	mg	94	15				