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 *	2014-09-09
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 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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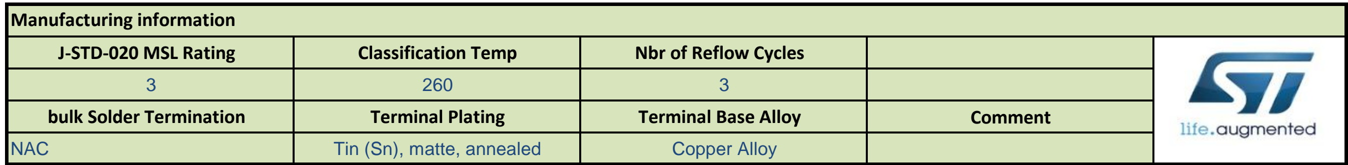
Legal Statement

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 omprehensive 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**
SPC56EL70L3CBFSR	DH1L*FL62BAQ	A	MA1A	2014-09-09
	Amount	**UoM**	**Unit type**	**ST ECOPACK Grade**
	681.44	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, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	14x14x1.4	100	flat	
Comment				

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	**Response**
Product(s) meets EU RoHS requirement without any exemptions	**true**
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
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
Product(s) is unknown, no information is available	false

Exemption Id.	Description

QueryList : REACH-16th June 2014	
Query	**Response**
The product 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	DH1L*FL62BAQ					
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	Other inorganic materials	56.309	mg	supplier	die	Silicon (Si)	7440-21-3		43.279	mg	768598	63511
Die or Dies				supplier	metallization	Aluminium (Al)	7429-90-5		0.080	mg	1421	117
Die or Dies				supplier	metallization	Copper (Cu)	7440-50-8		0.710	mg	12609	1042
Die or Dies				supplier	metallization	Tantalum (Ta)	7440-25-7		11.126	mg	197588	16327
Die or Dies				supplier	metallization	Cobalt (Co)	7440-48-4		0.002	mg	36	3
Die or Dies				supplier	metallization	Titanium (Ti)	7440-32-6		0.008	mg	142	12
Die or Dies				supplier	metallization	Tungsten (W)	7440-33-7		0.006	mg	107	9
Die or Dies				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.180	mg	3197	264
Die or Dies				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.459	mg	8151	674
Die or Dies				supplier	glass coating	Glass: Silicon Dioxide (Si02)	7631-86-9		0.459	mg	8151	674
Leadframe	Copper & its alloys	183.620	mg	supplier	alloy	Copper (Cu)	7440-50-8		171.314	mg	932981	251400
Leadframe				supplier	alloy	Nickel (Ni)	7440-02-0		5.342	mg	29093	7839
Leadframe				supplier	alloy	Magnesium (Mg)	7439-95-4		0.267	mg	1454	392
Leadframe				supplier	alloy	Silicon (Si)	7440-21-3		1.158	mg	6307	1699
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		5.539	mg	30166	8128
Die attach		8.451	mg	supplier	glue or tape	Isobornyl Methacrylate	7534-94-3		0.465	mg	55023	682
Die attach				#N/A	glue or tape	Bismaleimide resin	Proprietary		0.338	mg	39995	496
Die attach				#N/A	glue or tape	spacer polymer	Proprietary		0.042	mg	4970	62
Die attach				supplier	glue or tape	Silver (Ag)	7440-22-4		7.606	mg	900012	11162
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		0.658	mg	980626	966
Bonding wire				supplier	wire	Palladium (Pd)	7440-05-3		0.012	mg	17884	18
Bonding wire				supplier	wire	Silver (Ag)	7440-22-4		0.001	mg	1490	1
encapsulation		426.449	mg	#N/A	mold compound	Epoxy Resin	Proprietary		31.204	mg	73172	45791
encapsulation				#N/A	mold compound	Phenol Resin	Proprietary		31.204	mg	73172	45791
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		359.465	mg	842926	527508
encapsulation				supplier	mold compound	Quartz	14808-60-7		1.248	mg	2926	1831
encapsulation				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		2.080	mg	4877	3052
encapsulation				supplier	mold compound	Carbon black	1333-86-4		1.248	mg	2926	1831
connections coating	Solder	5.748	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		5.748	mg	1000000	8435