



## Materials Declaration Form

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

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	25-07-2017
<b>Company Unique ID</b>	NL 008751171B01		
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Contact Phone *</b>	Refer to Supplier Comment section	<b>Contact Email *</b>	Refer to Supplier Comment section
<b>Authorized Representative *</b>	MDG MD CHAMPION	<b>Representative Title</b>	MDG MD CHAMPION
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**Uncertainty Statement**

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**Legal Statement**

<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	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
STM8S105K6U3A	S4MG*766XXX	A	998Z	25-07-2017
	Amount	UoM	Unit type	ST ECOPACK Grade
	48,87	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 ( in each organic material)		

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	
Not Applicable; if coating is used or other bulk termination	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	5X5X0.55	32	No lead	
Comment	Package : A0B8 UFQFPN 5X5X0.55 32L 0.5 MM PITCH 8202208			

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

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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	S4MG*766XXXX				6000000.0	0.0
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	M-011 Other inorganic materials	1,884	mg	Supplier	die	Silicon (Si)	7440-21-3		1,745	mg	926221	35705
				Supplier	metallization	Aluminium (Al)	7429-90-5		0,012	mg	6369	246
				Supplier	metallization	Copper (Cu)	7440-50-8		0,040	mg	21231	818
				Supplier	metallization	Tantalum (Ta)	7440-25-7		0,005	mg	2654	102
				Supplier	metallization	Titanium (Ti)	7440-32-6		0,006	mg	3185	123
				Supplier	Passivation	Silicon Nitride	12033-89-5		0,011	mg	5839	225
				Supplier	Passivation	Silicon Oxide	7631-86-9		0,065	mg	34501	1330
Die Attach Epoxy_ABLEBOND 8290_H	M-011 Other inorganic materials	0,181	mg	Supplier	Metals	Silver	7440-22-4		0,128	mg	704535	2616
				Supplier	Plastics/polymers	Bisphenol-F, epoxy resin	9003-36-5		0,009	mg	48437	180
				Supplier	Polymers	Fatty acids, polymers with epichlorohydrin	68475-94-5		0,009	mg	48437	180
				Supplier	Organic Compounds	Gamma Butyrolactone	96-48-0		0,009	mg	48437	180
				Supplier	Epoxy Resin	Epoxy Resin	Proprietary		0,009	mg	48437	180
				Supplier	Amines	Poly(Oxy(methyl-1, 2-ethanediyl)	9046-10-0		0,009	mg	48437	180
				Supplier	Metallic compounds	Copper Oxide	1317-38-0		0,009	mg	48437	180
				Supplier	Organic Compounds	1,4-Bis(2,3-epoxypropoxy) butane	2425-79-8		0,001	mg	4844	18
				Supplier	Epoxy Resin	Epoxy Resin A	Proprietary		0,375	mg	19837	7665
				Supplier	Epoxy Resin	Epoxy Resin B	Proprietary		0,375	mg	19837	7665
Mold Compound_EME-G770_Sumitor	M-011 Other inorganic materials	18,030	mg	Supplier	Phenol Resin	Phenol Resin A	Proprietary		0,375	mg	19837	7665
				Supplier	Phenol Resin	Phenol Resin B	Proprietary		0,375	mg	19837	7665
				Supplier	Glass	Silica (Amorphous) A	60676-86-0		12,978	mg	732452	-734457
				Supplier	Glass	Silica (Amorphous) B	7631-86-9		3,074	mg	162767	62891
				Supplier	Metallic compounds	Metal Hydroxide	Proprietary		0,375	mg	19837	7665
				Supplier	Additives	Carbon Black	1333-86-4		0,106	mg	5595	2162
				Supplier	Metals	Silver	7440-22-4		0,191	mg	960000	3914
Bonding wire_WIRE AG Si TYPE_MKE	Bonding Wire	0,199	mg	Supplier	Metals	Others	Proprietary		0,008	mg	40000	163
				Supplier	Metals	Tin	7440-31-5		1,578	mg	1000000	32283
Anode Ball_Pure Tin_Nuonengda	M-011 Other inorganic materials	1,578	mg	Supplier	Metals	Nickel	7440-02-0		0,793	mg	29365	16223
				Supplier	Glass	Silicon	7440-21-3		0,176	mg	6500	3591
				Supplier	Metals	Magnesium	7439-95-4		0,042	mg	1565	865
				Supplier	Metals	Silver	7440-22-4		1,701	mg	63000	34805
				Supplier	Metals	Copper	7440-50-8		24,288	mg	899570	496974
Lead frame_C7+Ag_HDS	Copper & its alloys	27,000	mg	Supplier	Metals	Silver	7440-22-4		1,701	mg	63000	34805
				Supplier	Metals	Copper	7440-50-8		24,288	mg	899570	496974