



## Materials Declaration Form

<b>IPC Form Type *</b>	1752 Distribute	<b>Version</b>	2
<b>Sectionals *</b>	Material Info Manufacturing Info	<b>Subsectionals *</b>	A-D

*\* : Required Field*

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2015-08-11
<b>Contact Name *</b>	Refer to Supplier comment section	<b>Contact Title</b>	Refer to Supplier comment section
<b>Authorized Representative *</b>	Floriana San Biagio	<b>Representative Title</b>	AMS Material Declaration 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

**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
	A53N*MV4QAAA	A	MA1A	2015-08-11
	Amount	UoM	Unit type	ST ECOPACK Grade
	19.0	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		 life.augmented
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Nickel/Gold (Ni/Au), electrolytic	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
LGA	3x3x1	16	No lead	
Comment	Package: 3N LLGA 3X3X1.0 16L - FOR SENSOR; MDF valid for L3G20DH-L3G20DHTR-SV20HGTR			

QueryList : ROHS directive 2011/65/EU _ANNEX IV	
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	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices

QueryList : REACH-15th June 2015				
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	A53N*MV4QAAA									
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	8.689	mg	supplier	die	Silicon (Si)	7440-21-3		7.910	mg	910346	416316				
				supplier	metallisation	Aluminium (Al)	7429-90-5		0.023	mg	2647	1211				
				supplier	metallisation	Copper (Cu)	7440-50-8		0.050	mg	5754	2632				
				supplier	metallisation	Tantalum (Ta)	7440-25-7		0.009	mg	1036	474				
				supplier	metallisation	Titanium (Ti)	7440-32-6		0.005	mg	575	263				
				supplier	metallisation	Tungsten (W)	7440-33-7		0.001	mg	115	53				
				supplier	Passivation	Silicon Nitride (SiN)	12033-89-5		0.018	mg	2072	947				
				supplier	passivation	Silicon Oxide	7631-86-9		0.334	mg	38439	17579				
					JIG - R	die glass coating	Lead-Borate Glass	65997-18-4	7c-I-Electrical and electron	0.339	mg	39015	17842			
				substrate	Other Organic Materials	4.395	mg	supplier	core material	Bismaleimide (B)	105391-33-1		0.256	mg	58252	13474
supplier	core material	Triazine (T)	25722-66-1						0.256	mg	58252	13474				
supplier	core material	Fiber glass	65997-17-3						0.763	mg	173619	40158				
supplier	core material	Thermosetting resin	54208-63-8						0.428	mg	97390	22526				
supplier	core material	metal hydroxide	21645-51-2						0.017	mg	3868	895				
supplier	core material	Calcium sulfate	7778-18-9						0.009	mg	2048	474				
supplier	core material	Zinc hydroxide	20427-58-1						0.005	mg	1138	263				
supplier	Solder mask	Barium sulfate	7727-43-7						0.093	mg	21162	4895				
supplier	Solder mask	Acrylic resin	9003-01-4						0.144	mg	32767	7579				
supplier	Solder mask	Epoxy resin	29690-82-2						0.113	mg	25713	5947				
supplier	Solder mask	Biphenyl epoxy resin	85954-11-6						0.070	mg	15928	3684				
supplier	Solder mask	Talc containing no asbestiform fibers	14807-96-6						0.054	mg	12288	2842				
supplier	Solder mask	Methoxymethylethoxy propanol	34590-94-8						0.015	mg	3413	789				
supplier	Solder mask	Amorphous silica	7631-86-9						0.010	mg	2275	526				
supplier	Solder mask	3-methyl-methoxy-buthyl	103429-90-9						0.007	mg	1593	368				
supplier	Solder mask	Silica Cristobalite	14464-46-1						0.005	mg	1138	263				
supplier	Solder mask	Morpholine derivative	Proprietary						0.003	mg	683	158				
supplier	metallisation	Copper (Cu)	7440-50-8						2.147	mg	488472	112983				
Die attach	Other inorganic materials	0.227	mg					supplier	tape	epoxy resin	Proprietary		0.144	mg	634361	7579
								supplier	tape	polyolefin	9003-07-0		0.072	mg	317181	3789
				supplier	tape	Diphenol Propane Diglycidyl Ether	1675-54-3		0.011	mg	48458	579				
Die attach 2	Other inorganic materials	0.264	mg	supplier	tape	amorphous silica	7631-86-9		0.110	mg	416667	5789				
				supplier	tape	epoxy resin	25038-59-9		0.066	mg	250000	3474				
				supplier	tape	Acrylic resin	9003-01-4		0.044	mg	166667	2316				
				supplier	tape	Epoxyde Bisphenol A Resin	25068-38-6		0.044	mg	166667	2316				
Bonding wire	Precious metals	0.319	mg	supplier	wire	Gold (Au)	7440-57-5		0.316	mg	990596	16632				
				supplier	wire	Palladium (Pd)	7440-05-3		0.003	mg	9404	158				
encapsulation	Other Organic Materials	5.106	mg	supplier	mold compound	Silica, vitreous	60676-86-0		4.420	mg	865648	232632				
				supplier	mold compound	Epoxy Resin	85954-11-6		0.204	mg	39953	10737				
				supplier	mold compound	Phenol Resin	26834-02-6		0.204	mg	39953	10737				
				supplier	mold compound	Epoxyde Bisphenol A Resin	25068-38-6		0.153	mg	29965	8053				
				supplier	mold compound	Aluminium hydroxyde	21645-51-2		0.102	mg	19976	5368				
supplier	mold compound	Carbon black	1333-86-4		0.023	mg	4505	1211								