



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2015-08-07
Contact Name *	Refer to Supplier comment section	Contact Title	Refer to Supplier comment section
Authorized Representative *	Floriana San Biagio	Representative Title	AMS 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

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
	E53N*MT11ADA	A	MA1A	2015-08-07
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		
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used c	Nickel/Gold (Ni/Au), electrolytic	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
BGA	3x3x1	16	No lead	
Comment	Package: 3N LLGA 3X3X1.0 16L - FOR SENSOR; MDF valid for LIS331HH-LIS331HHTR			

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-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoele	

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	E53N*MT11ADA									
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)				
Dies	Other inorganic materials	6.009	mg	supplier	die	Silicon (Si)	7440-21-3		5.556	mg	924613	292421				
				supplier	metallisation	Aluminium (Al)	7429-90-5		0.019	mg	3162	1000				
				supplier	metallisation	Titanium (Ti)	7440-32-6		0.003	mg	499	158				
				supplier	metallisation	Tungsten (W)	7440-33-7		0.002	mg	333	105				
				supplier	Passivation	Silicon Nitride (SiN)	12033-89-5		0.009	mg	1498	474				
				supplier	passivation	Silicon Oxide	7631-86-9		0.071	mg	11816	3737				
					die glass coating	Lead-Borate Glass	65997-18-4	7c-l-Electrical and elector	0.321	mg	53420	16895				
				supplier	die polymer coating	PIX1 Gamma-butyrolactone	96-48-0		0.028	mg	4660	1474				
				substrate	Other Organic Materials	4.417	mg	supplier	core material	Bismaleimide (B)	105391-33-1		0.256	mg	57962	13474
								supplier	core material	Triazine (T)	25722-66-1		0.256	mg	57962	13474
supplier	core material	Fiber glass	65997-17-3						0.763	mg	172753	40158				
supplier	core material	Thermosetting resin	54208-63-8						0.428	mg	96905	22526				
supplier	core material	metal hydroxide	21645-51-2						0.017	mg	3849	895				
supplier	core material	Calcium sulfate	7778-18-9						0.009	mg	2038	474				
supplier	core material	Zinc hydroxide	20427-58-1						0.005	mg	1132	263				
supplier	Solder mask	Barium sulfate	7727-43-7						0.093	mg	21056	4895				
supplier	Solder mask	Acrylic resin	9003-01-4						0.144	mg	32604	7579				
supplier	Solder mask	Epoxy resin	29690-82-2						0.113	mg	25585	5947				
supplier	Solder mask	Biphenyl epoxy resin	85954-11-6						0.070	mg	15849	3684				
supplier	Solder mask	Talc containing no asbestiform fibers	14807-96-6						0.054	mg	12226	2842				
supplier	Solder mask	Methoxymethylethoxy propanol	34590-94-8						0.015	mg	3396	789				
supplier	Solder mask	Amorphous silica	7631-86-9						0.010	mg	2264	526				
supplier	Solder mask	3-methyl-methoxy-buthyl	103429-90-9						0.007	mg	1585	368				
supplier	Solder mask	Silica Cristobalite	14464-46-1						0.005	mg	1132	263				
supplier	Solder mask	Morpholine derivative	Proprietary						0.003	mg	679	158				
supplier	metallisation	Copper (Cu)	7440-50-8						2.147	mg	486163	113012				
supplier	metallisation	Nickel (Ni)	7440-02-0						0.019	mg	4279	995				
supplier	metallisation	Gold (Au)	7440-57-5						0.003	mg	581	135				
Die attach	Other inorganic materials	0.212	mg	supplier	tape	epoxy resin	Proprietary		0.134	mg	632075	7053				
				supplier	tape	polyolefin	9003-07-0		0.067	mg	316038	3526				
				supplier	tape	Diphenol Propane Diglycidyl Ether	1675-54-3		0.011	mg	51887	579				
Bonding wire	Precious metals	0.201	mg	supplier	wire	Gold (Au)	7440-57-5		0.199	mg	990050	10474				
				supplier	wire	Palladium (Pd)	7440-05-3		0.002	mg	9950	105				
encapsulation	Other Organic Materials	8.161	mg	supplier	mold compound	Silica, vitreous	60676-86-0		7.064	mg	865580	371789				
				supplier	mold compound	Epoxy Resin	85954-11-6		0.326	mg	39946	17158				
				supplier	mold compound	Phenol Resin	26834-02-6		0.326	mg	39946	17158				
				supplier	mold compound	Epoxyde Bisphenol A Resin	25068-38-6		0.245	mg	30021	12895				
				supplier	mold compound	Aluminium hydroxyde	21645-51-2		0.163	mg	19973	8579				
supplier	mold compound	Carbon black	1333-86-4		0.037	mg	4534	1947								