



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2020-03-02
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 *	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	B	MA1A	2020-03-02
Amount	UoM	Unit type	ST ECOPACK Grade	
19.0	mg	Each	ECOPACK® 2	

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	Nickel/Gold (Ni/Au), electrolytic	Copper Alloy	0	



Package Designator	Size	Nbr of instances	Shape	
LGA	3 x 3	16	flat	
Comment	3N LLGA 3X3X1.0 16L - FOR SENSOR; MDF is valid for LIS331HH-LIS331HHTR			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-March 2015	
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	7c-1-Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound

QueryList : ELV directive : 2000/53/EC amended 2017/2096 _November 2017	
Query	Response
1 - Product(s) meets EU ELV requirement without any exemptions	FALSE
2 - Product(s) meets EU ELV requirements by application of the selected exemption(s)	TRUE
Exemption Id.	Description
10a	Electrical and electronic components which contain lead in a glass or ceramic, in a glass or ceramic matrix compound, in a glass-ceramic material, or in a glass-ceramic matrix compound. This exemption does not cover the use of lead in: — glass in bulbs and glaze of spark plugs, — dielectric ceramic materials of components listed under 10(b), 10(c) and 10(d)

QueryList : California Prop65 list, dated 3rd January 2020			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			FALSE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			FALSE
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.162	substrate	8526
Lead	0.194	die	10189
Lead-Borate Glass	0.321	die	16895

QueryList : REACH-16th January 2020				
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
:				
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Homogeneous Material above the limits per the definition within REACH				TRUE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Homogeneous Material (mg)	Application - Homogeneous Material	ppm in Homogeneous Material
:				

Material Composition Declaration					Mfr Item Name	E53N/MT11ADA		19-0015		5/00000-0	1/00004-0					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)				
Dies	M-011 Other inorganic materials	5.987	mg	supplier	die	Silicon(Si)	7440-21-3		5.556	mg	928011	292421				
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.024	mg	4009	1263				
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.003	mg	501	158				
				supplier	metallisation	Tungsten(W)	7440-33-7		0.002	mg	334	105				
				supplier	Passivation	Silicon Nitride (SiN)	12033-89-5		0.009	mg	1503	474				
				supplier	passivation	Silicon Oxide	7631-86-9		0.072	mg	12026	3789				
					JIG-R & California 65	glass	65997-18-4	7c-l-Electrical and electr	0.321	mg	53616	16895				
				Substrate	M-015 Other organic materials	2.648	mg	supplier	laminata	Fiber glass	65997-17-3		0.752	mg	283988	39579
				supplier	laminata	Bismaleimide polymer	105391-33-1		0.252	mg	95166	13263				
				supplier	laminata	Triazine (T)	25722-66-1		0.252	mg	95166	13263				
supplier	laminata	Thermosetting resin	54208-63-8		0.422	mg	159366	22211								
supplier	laminata	Aluminium hydroxide	21645-51-2		0.017	mg	6420	895								
supplier	laminata	Calcium sulfate	7778-18-9		0.009	mg	3399	474								
supplier	laminata	Zinc hydroxide	20427-58-1		0.005	mg	1888	263								
supplier	laminata	Barium sulfate	7727-43-7		0.205	mg	77417	10789								
supplier	laminata	Bisphenol F type epoxy resin	9003-36-5		0.198	mg	74773	10421								
supplier	laminata	polymerized Biphenyl resin	85954-11-6		0.080	mg	30211	4211								
supplier	laminata	Talc containing no asbestos form fibers	14807-96-6		0.049	mg	18505	2579								
supplier	laminata	Methoxymethylethoxy propanol	34590-94-8		0.049	mg	18505	2579								
supplier	laminata	Amorphous silica	7631-86-9		0.037	mg	13973	1947								
supplier	M-004 Copper and its alloys		mg	supplier	metallisation	Copper(Cu)	7440-50-8		0.130	mg	49094	6842				
supplier	M-006 Nickel and its alloys		mg	supplier	metallisation	Nickel(Ni)	7440-02-0		0.162	mg	61178	8526				
supplier			mg	supplier	metallisation	Gold(Au)	7440-57-5		0.029	mg	10952	1526				
Die attach	M-015 Other organic materials	0.175	mg	supplier	tape	Epoxy resin	25068-38-6		0.110	mg	628571	5789				
				supplier	tape	Polypropylene	9003-07-0		0.004	mg	22857	211				
				supplier	tape	epoxy resin	29690-82-2		0.017	mg	97143	895				
				supplier	tape	Propenoate polymer	538311-13-6		0.035	mg	200000	1842				
				supplier	tape	Bisphenol A diglycidyl ether	1675-54-3		0.009	mg	51429	474				
				supplier	wire	Gold(Au)	7440-57-5		0.077	mg	987179	4053				
supplier	wire	Palladium(Pd)	7440-05-3		0.001	mg	12821	53								
encapsulation	M-015 Other organic materials	10.113	mg	supplier	mold compound	Silica vitreous	60876-86-0		8.752	mg	865421	460632				
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.405	mg	40047	21316				
				supplier	mold compound	Phenol resin	26834-02-6		0.405	mg	40047	21316				
				supplier	mold compound	Epoxyde bisphenol A resin	25068-38-6		0.303	mg	29961	15947				
				supplier	mold compound	Aluminium hydroxide	21645-51-2		0.202	mg	19974	10632				
				supplier	mold compound	Carbon black	1333-86-4		0.046	mg	4549	2421				