



## 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 *	2020-10-06
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 *	Antonella Lanzafame	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 : <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**

Supplier Acceptance *	true	Legal Declaration *	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
H3LIS331DL	A53N*MT78ADA	D	MA1A	2020-10-06
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			

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-I	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	TRUE
2 - Product(s) meets EU ELV requirements by application of the selected exemption(s)	FALSE
Exemption Id.	Description

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	alloy	8526
Lead	0.160	alloy	8442
Lead-Borate Glass	0.266	passivation	14000

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	A53N*MT78ADA		19.0000		4999998.0	1000000.0				
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	5.135	mg	supplier	die	Silicon(Si)	7440-21-3		4.743	mg	923661	249632				
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.022	mg	4284	1158				
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.003	mg	584	158				
				supplier	metallisation	Tungsten(W)	7440-33-7		0.018	mg	3505	947				
				supplier	Passivation	Silicon Nitride (SiN)	12033-89-5		0.009	mg	1753	474				
				supplier	passivation	Silicon Oxide	7631-86-9		0.074	mg	14411	3895				
Substrate	M-015 Other organic materials	2.648	mg	JIG-R & California 65	glass	Lead-Borate Glass	65997-18-4	7c-I-Electrical and electr	0.266	mg	51801	14000				
				supplier	laminate	Fiber glass	65997-17-3		0.752	mg	283988	39579				
				supplier	laminate	Bismaleimide polymer	105391-33-1		0.252	mg	95166	13263				
				supplier	laminate	Triazine (T)	25722-66-1		0.252	mg	95166	13263				
				supplier	laminate	Thermosetting resin	54208-63-8		0.422	mg	159366	22211				
				supplier	laminate	Aluminium hydroxide	21645-51-2		0.017	mg	6420	895				
				supplier	laminate	Calcium sulfate	7778-18-9		0.009	mg	3399	474				
				supplier	laminate	Zinc hydroxide	20427-58-1		0.005	mg	1888	263				
				supplier	laminate	Barium sulfate	7727-43-7		0.205	mg	77417	10789				
				supplier	laminate	Bisphenol F type epoxy resin	9003-36-5		0.198	mg	74773	10421				
				supplier	laminate	polymerized Biphenyl resin	85954-11-6		0.080	mg	30211	4211				
				supplier	laminate	Talc containing no asbestiform fibers	14807-96-6		0.049	mg	18505	2579				
				supplier	laminate	Methoxymethylethoxy propanol	34590-94-8		0.049	mg	18505	2579				
				supplier	laminate	Amorphous silica	7631-86-9		0.037	mg	13973	1947				
					M-004 Copper and its alloys	supplier	metallisation	Copper(Cu)	7440-50-8		0.130	mg	49094	6842		
					M-006 Nickel and its alloys	supplier	metallisation	Nickel(Ni)	7440-02-0		0.162	mg	61178	8526		
				Die attach	M-015 Other organic materials	0.144	mg	supplier	metallisation	Gold(Au)	7440-57-5		0.029	mg	10952	1526
								supplier	tape	Epoxy resin	25068-38-6		0.091	mg	631944	4789
supplier	tape	Polypropylene	9003-07-0						0.003	mg	20833	158				
supplier	tape	epoxy resin	29690-82-2						0.014	mg	97222	737				
supplier	tape	Propenoate polymer	538311-13-6						0.029	mg	201389	1526				
supplier	tape	Bisphenol A diglycidyl ether	1675-54-3						0.007	mg	48611	368				
Bonding wire	M-008 Precious metals	0.134	mg	supplier	wire	Gold(Au)	7440-57-5		0.133	mg	992537	7000				
				supplier	wire	Palladium(Pd)	7440-05-3		0.001	mg	7463	53				
encapsulation	M-015 Other organic materials	10.939	mg	supplier	mold compound	Silica vitreous	60676-86-0		9.467	mg	865436	498263				
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.438	mg	40040	23053				
				supplier	mold compound	Phenol resin	26834-02-6		0.438	mg	40040	23053				
				supplier	mold compound	Epoxyde bisphenol A resin	25068-38-6		0.328	mg	29984	17263				
				supplier	mold compound	Aluminium hydroxide	21645-51-2		0.219	mg	20020	11526				
				supplier	mold compound	Carbon black	1333-86-4		0.049	mg	4479	2579				