



## Materials Declaration Form

<b>IPC</b>	1752	<b>Version</b>	2
<b>Form Type *</b>	Distribute		
<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>	2020-10-06
<b>Contact Name *</b>	Refer to Supplier comment section	<b>Contact Title</b>	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>	Antonella Lanzafame	<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
LIS3MDLTR	21UA*MT761A3	C	MA1A	2020-10-06
Amount	UoM	Unit type	ST ECOPACK Grade	
8.0	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	
NAC	Nickel/Gold (Ni/Au), electrolytic	Copper Alloy	0	



Package Designator	Size	Nbr of instances	Shape	
LGA	212	12	Flat	
Comment	VFLGA 2X2X1 12LD PITCH 0.5M			

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)	true
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	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 2020/363_ March 2020	
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	0.074	alloy	9250
Lead-Borate Glass	0.031	passivation	3875

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

QueryList : Korea Chemical Control Act_ 27 Dec 2017 update				
Query				Response
The Product does contain at least one of the substances listed in Chemical Control Act				false
Substance present in device Homogeneous Material				
Substance	Homogeneous Material impacted	Concentration in the material(%)	Application Purpose	

Material Composition Declaration						Mfr Item Name	21UA*MT761A3		8.0000		5000004.0	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	0.732	mg	supplier	die	Silicon(Si)	7440-21-3		0.621	mg	848361	77625				
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.006	mg	8197	750				
				supplier	metallisation	Copper(Cu)	7440-50-8		0.018	mg	24590	2250				
				supplier	metallisation	Tantalum(Ta)	7440-25-7		0.004	mg	5464	500				
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.002	mg	2732	250				
				supplier	Passivation	Silicon Nitride (SiN)	12033-89-5		0.006	mg	8197	750				
				supplier	passivation	Silicon Oxide	7631-86-9		0.044	mg	60109	5500				
				JIG-R & California 65	glass	Lead-Borate Glass	65997-18-4	7c-I-Electrical and elect	0.031	mg	42350	3875				
				Substrate	M-015 Other organic materials	1.878	mg	supplier	laminate	Fiber glass	65997-17-3		0.333	mg	177316	41625
								supplier	laminate	Bismaleimide polymer	105391-33-1		0.112	mg	59638	14000
supplier	laminate	Triazine (T)	25722-66-1						0.112	mg	59638	14000				
supplier	laminate	Thermosetting resin	54208-63-8						0.187	mg	99574	23375				
supplier	laminate	Aluminium hydroxide	21645-51-2						0.008	mg	4260	1000				
supplier	laminate	Calcium sulfate	7778-18-9						0.004	mg	2130	500				
supplier	laminate	Zinc hydroxide	20427-58-1						0.002	mg	1065	250				
supplier	laminate	Barium sulfate	7727-43-7						0.109	mg	58040	13625				
supplier	laminate	Bisphenol F type epoxy resin	9003-36-5						0.105	mg	55911	13125				
supplier	laminate	polymerized Biphenyl resin	85954-11-6						0.043	mg	22897	5375				
supplier	laminate	Talc containing no asbestiform fibers	14807-96-6						0.026	mg	13845	3250				
supplier	laminate	Methoxymethylethoxy propanol	34590-94-8						0.026	mg	13845	3250				
supplier	laminate	Amorphous silica	7631-86-9						0.020	mg	10650	2500				
supplier	metallisation	Copper(Cu)	7440-50-8						0.713	mg	379659	89125				
supplier	metallisation	Nickel(Ni)	7440-02-0						0.074	mg	39404	9250				
supplier	metallisation	Gold(Au)	7440-57-5						0.004	mg	2130	500				
Die attach	M-015 Other organic materials	0.081	mg					supplier	tape	Epoxy resin	25068-38-6		0.051	mg	629630	6375
								supplier	tape	Polypropylene	9003-07-0		0.002	mg	24691	250
								supplier	tape	epoxy resin	29690-82-2		0.008	mg	98765	1000
								supplier	tape	Propenoate polymer	538311-13-6		0.016	mg	197531	2000
				supplier	tape	Bisphenol A diglycidyl ether	1675-54-3		0.004	mg	49383	500				
Bonding wire	M-004 Copper and its alloys	0.125	mg	supplier	wire	Copper(Cu)	7440-50-8		0.121	mg	968000	15125				
				supplier	wire	Palladium(Pd)	7440-05-3		0.004	mg	32000	500				
Encapsulation	M-015 Other organic materials	5.184	mg	supplier	mold compound	Silica vitreous	60676-86-0		4.487	mg	865548	560875				
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.207	mg	39931	25875				
				supplier	mold compound	Phenol resin	26834-02-6		0.207	mg	39931	25875				
				supplier	mold compound	Epoxyde bisphenol A resin	25068-38-6		0.156	mg	30093	19500				
				supplier	mold compound	Aluminium hydroxide	21645-51-2		0.104	mg	20062	13000				
supplier	mold compound	Carbon black	1333-86-4		0.023	mg	4437	2875								
									mg							