



## 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

<b>Supplier Information</b>			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2020-04-30
<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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<b>Legal Statement</b>			
<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
LIS2DWTR	77ED*MV8QBBA	B	CA2A	2020-04-30
	Amount	UoM	Unit type	ST ECOPACK Grade
	6.0	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/Palladium/Gold (Ni/Pd/Au)	Copper Alloy	0



Package Designator	Size	Nbr of instances	Shape
LGA	20.72	14	flat
Comment	VFLGA 2X2X0.7MM MAX 14L		

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	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			TRUE
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.050	allou	8333
Lead-Borate Glass	0.170	passivation	28333
Bisphenol A	0.001	tape	167

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				NO
Substance present in device Homogeneous Material				
Substance	Homogeneous Material impacted	Concentration in the material(%)	Application Purpose	

Material Composition Declaration						Mfr Item Name	77ED*MV8QBBA		0.000		000000.0	000000.0				
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	2.108	mg	supplier	die	Silicon(Si)	7440-21-3		1.878	mg	890892	313000				
				supplier	metallisation	Aluminum(Al)	7429-90-5		0.007	mg	3321	1167				
				supplier	metallisation	Copper(Cu)	7440-50-8		0.008	mg	3795	1333				
				supplier	metallisation	Tantalum(Ta)	7440-25-7		0.002	mg	949	333				
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.003	mg	1423	500				
				supplier	metallisation	Tungsten(W)	7440-33-7		0.001	mg	474	167				
				supplier	Passivation	Silicon Nitride (SiN)	12033-89-5		0.006	mg	2846	1000				
				supplier	passivation	Silicon Oxide	7631-86-9		0.033	mg	15655	5500				
				JIG-R & California 65	glass	Lead-Borate Glass	65997-18-4	7c-1-Electrical and electri	0.170	mg	80645	28333				
				Substrate	M-015 Other organic materials	1.408	mg	supplier	laminata	Fiber glass	65997-17-3		0.209	mg	148438	34833
								supplier	laminata	Biaphenol F type epoxy resin	9003-36-5		0.197	mg	139915	32833
								supplier	laminata	Bismaleimide (B)	105391-33-1		0.070	mg	49716	11667
								supplier	laminata	Triazine (T)	25722-66-1		0.070	mg	49716	11667
supplier	laminata	Aluminium hydroxide	21645-61-2						0.005	mg	3551	833				
supplier	laminata	Zinc hydroxide	20427-58-1						0.001	mg	710	167				
supplier	laminata	Calcium sulfate	7778-18-9						0.002	mg	1420	333				
SVHC	laminata	BPA	80-05-7						0.001	mg	710	167				
supplier	laminata	Barium sulfate	7727-43-7						0.089	mg	63210	14833				
supplier	laminata	polymerized Biphenyl resin	85954-11-6						0.034	mg	24148	5667				
supplier	laminata	Talc containing no asbestiform fibers	14807-96-6						0.022	mg	15625	3667				
supplier	laminata	Methoxymethylethoxy propanol	34590-94-8						0.020	mg	14205	3333				
supplier	laminata	Amorphous silica	7631-86-9						0.017	mg	12074	2833				
SVHC	laminata	Morpholine derivative	119313-12-1						0.014	mg	9943	2333				
supplier	laminata	Naphta	84742-94-5						0.003	mg	2131	500				
supplier	metallisation	Copper(Cu)	7440-50-8						0.594	mg	421875	99000				
M-004 Copper and its alloys	supplier	metallisation	Nickel(Ni)					7440-02-0		0.050	mg	35511	8333			
M-006 Nickel and its alloys	supplier	metallisation	Gold(Au)					7440-57-5		0.010	mg	7102	1667			
Die attach	M-015 Other organic materials	0.092	mg					supplier	tape	Epoxy resin	25068-38-6		0.058	mg	630435	9667
								supplier	tape	Polypropylene	9003-07-0		0.002	mg	21739	333
								supplier	tape	epoxy resin	29690-82-2		0.009	mg	97826	1500
								supplier	tape	Propenoate polymer	538311-13-6		0.018	mg	195652	3000
								supplier	tape	Biaphenol A diglycidyl ether	1675-54-3		0.005	mg	54348	833
				supplier	tape	Acrylic resin	538311-13-6		0.039	mg	639344	6500				
Die attach 2		0.061	mg	supplier	tape	Polypropylene	9003-07-0		0.001	mg	16393	167				
				supplier	tape	epoxy resin	29690-82-2		0.006	mg	98361	1000				
				supplier	tape	Propenoate polymer	538311-13-6		0.012	mg	196721	2000				
				supplier	tape	Biaphenol A diglycidyl ether	1675-54-3		0.003	mg	49180	500				
				supplier	wire	Gold(Au)	7440-57-5		0.014	mg	1000000	2333				
Bonding wire encapsulation	M-008 Precious metals	0.014	mg	supplier	mold compound	Silica vitreous	60676-86-0		2.096	mg	904618	349333				
				supplier	mold compound	Epoxyde bisphenol A resin	25068-38-6		0.058	mg	25032	9667				
				supplier	mold compound	Epoxy resin	proprietary		0.093	mg	40138	15500				
				supplier	mold compound	Phenol Resin	proprietary		0.058	mg	25032	9667				
				supplier	mold compound	Carbon black	1333-86-4		0.012	mg	5179	2000				
				supplier	mold compound											