



## Materials Declaration Form

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

<b>Supplier Information</b>			
Company Name *	STMicroelectronics	Response Date *	2020-02-19
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 : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

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<b>Legal Statement</b>			
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
0	22AA*U39DBA1	B	MA1A	2020-02-19
	Amount	UoM	Unit type	ST ECOPACK Grade
	69.0	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	4 x 4	16	flat	
Comment	A0DD LGA 4.4x7.5x1.16L - FOR SENSORS; MDF is valid for AIS3LV02DLTR-LIS3LV02DL-LIS3LV02DLTR			

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	0.343	substrate	4971
Lead	0.464	die	6720
Lead-Borate Glass	0.769	die	11145

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				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Morpholine derivative	1000	0.195	Substrate	2826
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Homogeneous Material above the limits per the definition within REACH				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Homogeneous Material (mg)	Application - Homogeneous Material	ppm in Homogeneous Material
Morpholine derivative	1000	0.195	Substrate	10290

Material Composition Declaration					Mfr Item Name	22AA*U39DBA1	69 0015	5900300.0	999996.0							
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	20.721	mg	supplier	die	Silicon(Si)	7440-21-3		19.668	mg	949182	285043				
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.047	mg	2268	681				
				supplier	metallisation	Copper(Cu)	7440-50-8		0.001	mg	48	14				
				supplier	metallisation	Tantalum(Ta)	7440-25-7		0.001	mg	48	14				
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.006	mg	290	87				
				supplier	metallisation	Tungsten(W)	7440-33-7		0.004	mg	193	58				
				supplier	Passivation	Silicon Nitride (SiN)	12033-89-5		0.019	mg	917	275				
				supplier	passivation	Silicon Oxide	7631-86-9		0.152	mg	7336	2203				
					JIG-R & California 65			supplier	glass	Lead-Borate Glass	65997-18-4	7c-I-Electrical and electr	0.769	mg	37112	11145
								supplier	polymer coating	polyimide	proprietary		0.054	mg	2606	783
				Substrate	M-015 Other organic materials	18.95	mg	supplier	laminata	Fiber glass	65987-17-3		2.765	mg	145910	40072
								supplier	laminata	Bismaleimide polymer	105391-33-1		0.927	mg	48918	13435
								supplier	laminata	Triazine (T)	25722-66-1		0.927	mg	48918	13435
supplier	laminata	Thermosetting resin	54208-63-8						1.552	mg	81900	22493				
supplier	laminata	Aluminium hydroxide	21645-51-2						0.063	mg	3325	913				
supplier	laminata	Calcium sulfate	7778-18-9						0.031	mg	1636	449				
supplier	laminata	Zinc hydroxide	20427-58-1						0.019	mg	1003	275				
supplier	laminata	Barium sulfate	7727-43-7						1.247	mg	65805	18072				
supplier	laminata	Bisphenol F type epoxy resin	9003-36-5						1.133	mg	59789	16420				
supplier	laminata	polymerized Biphenyl resin	85954-11-6						0.469	mg	24749	6797				
supplier	laminata	Talc containing no asbestiform fibers	14807-96-6						0.312	mg	16464	4522				
supplier	laminata	Methoxyethylethoxy propanol	34590-94-8						0.273	mg	14406	3957				
supplier	laminata	Amorphous silica	7631-86-9						0.234	mg	12348	3391				
	SVHC							supplier	laminata	Morpholine derivative	119313-12-1		0.195	mg	10290	2826
								supplier	laminata	Naphta	64742-94-5		0.039	mg	2058	565
								supplier	laminata	Copper Phthalocyanine	14302-13-7		0.002	mg	106	29
								supplier	laminata	Chlorine	22537-15-1		0.001	mg	53	14
	M-004 Copper and its alloys							supplier	metallisation	Copper(Cu)	7440-50-8		8.357	mg	441003	121116
	M-006 Nickel and its alloys							supplier	metallisation	Nickel(Ni)	7440-02-0		0.343	mg	18100	4971
								supplier	metallisation	Gold(Au)	7440-57-5		0.061	mg	3219	884
Die attach	M-015 Other organic materials	0.231	mg					supplier	tape	Epoxy resin	25068-38-6		0.145	mg	627706	2101
								supplier	tape	Polypropylene	9003-07-0		0.005	mg	21645	72
								supplier	tape	epoxy resin	29690-82-2		0.023	mg	99567	333
				supplier	tape	Propenoate polymer	538311-13-6		0.046	mg	199134	667				
				supplier	tape	Bisphenol A diglycidyl ether	1675-54-3		0.012	mg	51948	174				
Bonding wire	M-008 Precious metals	0.116	mg	supplier	wire	Gold(Au)	7440-57-5		0.115	mg	991379	1667				
				supplier	wire	Palladium(Pd)	7440-05-3		0.001	mg	8621	14				
encapsulation	M-015 Other organic materials	28.982	mg	supplier	mold compound	Silica vitreous	60676-86-0		25.084	mg	865503	363536				
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		1.159	mg	39990	16797				
				supplier	mold compound	Phenol resin	26834-02-6		1.159	mg	39990	16797				
				supplier	mold compound	Epoxydie bisphenol A resin	25068-38-6		0.870	mg	30019	12609				
				supplier	mold compound	Aluminium hydroxide	21645-51-2		0.580	mg	20012	8406				
				supplier	mold compound	Carbon black	1333-86-4		0.130	mg	4486	1884				