



## 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>	2019-11-18
<b>Company Unique ID</b>	NL 008751171B01		
<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>	Floriana SAN BIAGIO	<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>		

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Legal Statement	
<b>Supplier Acceptance *</b>	true
<b>Legal Declaration *</b>	Standard
<b>Legal Statement</b>	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 omprehensive 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
	27AA*MV8TABD	A	MA1A	2019-11-18
Amount	UoM	Unit type	ST ECOPACK Grade	
14.0	mg	Each	ECOPACK® 2	
Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant			

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	2.5 x 3	14	flat	
Comment	A08N VFLGA2.5X3X.86 14L P.5 L.475X.25; MDF is valid for LSM6DSRTR			

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 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 28th June 2019			
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	0.065	substrate	4643
Lead	0.192	die	13743
Lead-Borate Glass	0.319	die	22786

QueryList : REACH-16th July 2019				
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
Lead	1000	0.192	die	13743
;				















Material Composition Declaration					Mfr Item Name	27AA*MV8TABD	14.0000	6000000.0	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	6.902	mg	supplier	die	Silicon(Si)	7440-21-3		6.389	mg	925674	456357				
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.012	mg	1739	857				
				supplier	metallisation	Copper(Cu)	7440-50-8		0.046	mg	6665	3286				
				supplier	metallisation	Cobalt(Co)	7440-48-4		0.013	mg	1884	929				
				supplier	metallisation	Tantalum(Ta)	7440-25-7		0.009	mg	1304	643				
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.005	mg	724	357				
				supplier	metallisation	Tungsten(W)	7440-33-7		0.001	mg	145	71				
				supplier	metallisation	Zirconium(Zr)	7440-67-7		0.002	mg	290	143				
				supplier	Passivation	Silicon Nitride (SiN)	12033-89-5		0.014	mg	2028	1000				
				supplier	passivation	Silicon Oxide	7631-86-9		0.092	mg	13329	6571				
							JIG-R & California 65	glass	Lead-Borate Glass	65997-18-4	7c-I-Electrical and electr	0.319	mg	46218	22786	
				Substrate	M-015 Other organic materials	3.299	mg	supplier	laminata	Fiber glass	65997-17-3		0.437	mg	132464	31214
supplier	laminata	Epoxy resin	61788-97-4						0.092	mg	27887	6571				
supplier	laminata	Triazine (T)	25722-66-1						0.117	mg	35465	8357				
supplier	laminata	Epoxy resin	223769-10-6						0.049	mg	14853	3500				
supplier	laminata	Calcium carbonate	471-34-1						0.194	mg	58806	13857				
supplier	laminata	Amorphous silica	7631-86-9						0.068	mg	20612	4857				
supplier	laminata	Metal hydroxide	proprietary						0.015	mg	4547	1071				
supplier	laminata	Copper(Cu)	7440-50-8						1.659	mg	502880	118500				
supplier	laminata	Acrylic resin	9003-01-4						0.210	mg	63656	15000				
supplier	laminata	Barium sulfate	7727-43-7						0.089	mg	26978	6357				
supplier	laminata	epoxy resin	85954-11-6						0.077	mg	23340	5500				
supplier	laminata	Talc	14807-96-6						0.053	mg	16065	3786				
supplier	laminata	Aromatic hydrocarbon	64742-94-5						0.024	mg	7275	1714				
supplier	laminata	Methoxymethylethoxy propanol	34590-94-8						0.059	mg	17884	4214				
supplier	laminata	Acetate compound	112-15-2						0.059	mg	17884	4214				
supplier	laminata	DPMA	88917-22-0						0.012	mg	3637	857				
supplier	laminata	Diphenyl-trimethylbenzoyl phosphine oxide	75980-60-8						0.009	mg	2728	643				
	M-006 Nickel and its alloys							supplier	metallisation	Nickel(Ni)	7440-02-0		0.065	mg	19703	4643
								supplier	metallisation	Gold(Au)	7440-57-5		0.011	mg	3334	786
Die attach	M-015 Other organic materials	0.211	mg					supplier	tape	Epoxy resin	25068-38-6		0.133	mg	630332	9500
				supplier	tape	Polypropylene	9003-07-0		0.004	mg	18957	286				
				supplier	tape	epoxy resin	29690-82-2		0.021	mg	99526	1500				
				supplier	tape	Propenoate polymer	538311-13-6		0.042	mg	199052	3000				
				supplier	tape	Bisphenol A diglycidyl ether	1675-54-3		0.011	mg	52133	786				
Die attach 2	M-015 Other organic materials	0.203	mg	supplier	tape	Amorphous silica	7631-86-9		0.084	mg	413793	6000				
				supplier	tape	Polyethylen terephthalate	25038-59-9		0.051	mg	251232	3643				
				supplier	tape	Acrylic resin	9003-01-4		0.034	mg	167488	2429				
				supplier	tape	Epoxyde bisphenol A resin	25068-38-6		0.034	mg	167488	2429				
Bonding wire	M-008 Precious metals	0.109	mg	supplier	wire	Gold(Au)	7440-57-5		0.109	mg	1000000	7786				
encapsulation	M-015 Other organic materials	3.276	mg	supplier	mold compound	Silica vitreous	60676-86-0		2.965	mg	905067	211786				
				supplier	mold compound	Epoxyde bisphenol A resin	25068-38-6		0.082	mg	25031	5857				
				supplier	mold compound	Epoxy resin	proprietary		0.131	mg	39988	9357				
				supplier	mold compound	Phenol Resin	proprietary		0.082	mg	25031	5857				
				supplier	mold compound	Carbon black	1333-86-4		0.016	mg	4884	1143				