



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2020-10-19
Company Unique ID	NL 008751171B01		
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 : http://www.st.com/web/en/support/support.html		

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Legal Statement			
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
	77EE*MV8SBBA	B	PC17	2020-10-19
	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/Gold (Ni/Au), electrolytic	Copper Alloy	0	



Package Designator	Size	Nbr of instances	Shape	
LGA	2 x 2	12	Flat	
Comment	A069 LGA2X2X0.7 12 LEADS; MDF is valid for LIS2DW12			

QueryList : RoHS Directive 2011/65/EU- 8 June 2011 – Annex II amended by Delegated Directive 2015/863 - 31 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	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.

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	0.063	substrate	10500
Lead	0.103	die	17083
Lead-Borate Glass	0.170	die	28333

QueryList : REACH-25th June 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

Material Composition Declaration					Mfr Item Name	77EE'MV8SBB	6.0005		5999998.0	999999.0						
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	2.118	mg	supplier	die	Silicon(Si)	7440-21-3		1.878	mg	886686	313000				
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.007	mg	3305	1167				
				supplier	metallisation	Copper(Cu)	7440-50-8		0.017	mg	8026	2833				
				supplier	metallisation	Tantalum(Ta)	7440-25-7		0.003	mg	1416	500				
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.002	mg	944	333				
				supplier	Passivation	Silicon Nitride (SiN)	12033-89-5		0.007	mg	3305	1167				
				supplier	passivation	Silicon Oxide	7631-86-9		0.034	mg	16053	5667				
				JIG-R & California 65	glass	Lead-Borate Glass	65997-18-4	7c-I-Electrical and electr	0.170	mg	80264	28333				
				supplier	laminante	Fiber glass	85997-17-3		0.209	mg	147703	34833				
				supplier	laminante	Bisphenol F type epoxy resin	9003-36-5		0.117	mg	82686	19500				
Substrate	M-015 Other organic materials	1.415	mg	supplier	laminante	Bismaleimide (B)	105391-33-1		0.071	mg	50177	11833				
				supplier	laminante	Triazine (T)	25722-66-1		0.070	mg	49470	11667				
				supplier	laminante	Aluminium hydroxide	21645-51-2		0.005	mg	3534	833				
				supplier	laminante	Zinc hydroxide	20427-58-1		0.001	mg	707	167				
				supplier	laminante	Calcium sulfate	7778-18-9		0.002	mg	1413	333				
				SVHC	laminante	BPA	80-05-7		0.001	mg	707	167				
				supplier	laminante	Acrylic resin	9003-01-4		0.097	mg	68551	16167				
				supplier	laminante	Barium sulfate	7727-43-7		0.041	mg	28975	6833				
				supplier	laminante	epoxy resin	85954-11-6		0.036	mg	25442	6000				
				supplier	laminante	Talc	14807-96-6		0.025	mg	17668	4167				
				supplier	laminante	Aromatic hydrocarbon	64742-94-5		0.011	mg	7774	1833				
				supplier	laminante	Methoxymethylethoxy propanol	34590-94-8		0.027	mg	19081	4500				
				supplier	laminante	Acetate compound	112-15-2		0.027	mg	19081	4500				
				supplier	laminante	DPMA	89917-22-0		0.005	mg	3534	833				
				supplier	laminante	Diphenyl-trimethylbenzoyl phosphine oxide	75980-60-8		0.004	mg	2827	667				
				supplier	metallisation	Copper(Cu)	7440-50-8		0.590	mg	416661	98333				
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.063	mg	44523	10500				
				supplier	metallisation	Gold(Au)	7440-57-5		0.013	mg	9187	2167				
				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	proprietary						0.018	mg	195652	3000				
supplier	tape	Bisphenol A diglycidyl ether	1675-54-3						0.005	mg	54348	833				
Die attach 2	M-015 Other organic materials	0.061	mg	supplier	tape	Acrylic resin	proprietary		0.039	mg	639344	6500				
				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	proprietary		0.012	mg	196721	2000				
				supplier	tape	Bisphenol A diglycidyl ether	1675-54-3		0.003	mg	49180	500				
Bonding wire	M-008 Precious metals	0.027	mg	supplier	wire	Gold(Au)	7440-57-5		0.027	mg	1000000	4500				
Encapsulation	M-015 Other organic materials	2.287	mg	supplier	mold compound	Silica vitreous	60676-86-0		2.070	mg	905116	345000				
				supplier	mold compound	Epoxyde bisphenol A resin	25068-38-6		0.057	mg	24923	9500				
				supplier	mold compound	Epoxy resin	proprietary		0.092	mg	40227	15333				
				supplier	mold compound	Phenol Resin	proprietary		0.057	mg	24923	9500				
				supplier	mold compound	Carbon black	1333-86-4		0.011	mg	4810	1833				