



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2022-03-07
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		

Uncertainty Statement


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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
	A1CC*MY1ABAA	A	9994D	2022-03-07
	Amount	UoM	Unit type	ST ECOPACK Grade
	27.4	mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
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	3.2 x 4.2	10	Flat
Comment	B08K LGA 3.2X4.2X1.455MM 10L 0.5MM; MDF is valid for STHS34PF80TR-STHS34PF80		

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-1	7c-1-Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectric devices, or in a glass or ceramic matrix compound

QueryList : California Prop65 list, dated 17th Dec 2021			
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	0.000		0
Lead	0.092	die (lead content in Lead-Borate glass)	3345
Lead-Borate Glass	0.152	die	5544
Lead Zirconate Titanate (PZT)	0.000		0
Antimony trioxide	0.000		0
Bisphenol A	0.000		0
Gallium Arsenide	0.000		0

QueryList : Chinese RoHS , references : SJT 11364 – 2014 and GBT 26572 – 2014				
Query				Response
1 - Product(s) requires marking for the presence of restricted substances and must be marked with an Environmental Protection Use Period under China's Measures for Administration of the control of pollution by Electronic Information Products				false
2 - Product(s) is eligible for marking with the e code under China's Measures for Administration of the control of pollution by Electronic Information Products				false
Hasardous substance				
Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	Hexavalent Chromium (Cr VI)	PBB & PBDE
X	O	O	O	O
Dies				
is Homogeneous Material containing Lead				

QueryList : REACH-17th January 2022				
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

Responsible metals sourcing	
Query	Response
The component is containing at least one of the following metals : Cobalt , Gold , Tantalum , Tin , Tungsten.	true
The following metals are present is the component :	Gold, Tantalum, Tin,
This product is in the scope of the responsible metals sourcing, its compliance is covered by our company processes .	ST Restricted

China GB 33372-2020 Limit standard for volatile organic compounds content in adhesives - 4 March 2020 application date 1st December 2020	
Query	Response
The product contains adhesives identified under GB 33372	false

Stockholm Convention Persistent Organic Pollutants	
Query	Response
Product is compliant with Stockholm Convention Persistent Organic Pollutants Annex I	false

Material Composition Declaration						Mfr Item Name	A1CC/MY1ABAA		27.4177		9000870	1000045
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	6.523	mg	supplier	die	Silicon(Si)	7440-21-3		6.313	mg	967806	230264
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.006	mg	920	219
				supplier	metallisation	Copper(Cu)	7440-50-8		0.018	mg	2759	657
				supplier	metallisation	Tantalum(Ta)	7440-25-7		0.003	mg	460	109
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.002	mg	307	73
				supplier	metallisation	Zirconium(Zr)	7440-67-7		0.007	mg	1073	255
				supplier	Passivation	Silicon Nitride (SiN)	12033-89-5		0.005	mg	767	182
				supplier	passivation	Silicon Oxide	7631-86-9		0.017	mg	2806	620
					JIG-R & California 65	glass	65997-19-4	7c-1-Electrical and electr	0.152	mg	23302	5544
				Supplier		laminare	Thermosetting resin (including filler)	proprietary	1.111	mg	232087	40523
Substrate	M-015 Other organic materials	4.787	mg	supplier	laminare	Glass cloth	65997-17-3		1.111	mg	232087	40523
				supplier	laminare	Copper foil	7440-50-8		2.051	mg	428452	74810
				supplier	laminare	Barium Sulfate	7727-43-7		0.285	mg	59536	10395
				supplier	laminare	Solvent naphtha (petroleum), heavy aromat	64742-94-5		0.103	mg	21517	3757
				supplier	laminare	Diethylene glycol monoethyl ether acetate	112-15-2		0.051	mg	10654	1860
				supplier	SVHC	2-Methyl-1-(4-methylthiophenyl)-2-morphol	71868-10-5		0.026	mg	5431	948
				supplier	laminare	Talc(containing no asbestos fibers)	14807-96-6		0.021	mg	4387	766
				supplier	laminare	Dipropylene glycol methyl ether	34590-94-8		0.026	mg	5431	948
				supplier	laminare	Carbon black	1333-86-4		0.003	mg	627	109
				supplier	DAF	Silica	7631-86-9		0.064	mg	600472	2322
Die attach	M-015 Other organic materials	0.106	mg	supplier	DAF	Modified Epoxy Resin	Proprietary		0.027	mg	250189	967
				supplier	DAF	Epoxy resin	29690-82-2		0.005	mg	50000	193
				supplier	DAF	proprietary	Proprietary		0.005	mg	50000	193
				supplier	DAF	Epoxy resin	Proprietary		0.005	mg	50000	193
				supplier	DAF	Modified Epoxy Resin	Proprietary		0.037	mg	620209	1363
Die attach 2	M-015 Other organic materials	0.060	mg	supplier	DAF	Epoxy resin	29690-82-2		0.015	mg	250041	550
				supplier	DAF	Aromatic polyamine	Proprietary		0.003	mg	49942	110
				supplier	DAF	Modified Siloxane	Proprietary		0.003	mg	49942	110
				supplier	DAF	Silane	Proprietary		0.001	mg	14933	33
				supplier	DAF	Epoxy Resin	Proprietary		0.001	mg	14933	33
Bonding wire	M-008 Precious metals	0.052	mg	supplier	wire	Gold(Au)	7440-57-5		0.051	mg	989919	1862
				supplier	wire	Palladium(Pd)	7440-05-3		0.001	mg	10081	19
Lid attach	M-015 Other organic materials	1.764	mg	supplier	adhesive	Epoxy resin1	25085-99-8		0.882	mg	500000	32171
				supplier	adhesive	Epoxy resin2	2095-03-6		0.176	mg	100000	6434
				supplier	adhesive	Dicyanodiamide	461-58-5		0.282	mg	160000	10295
				supplier	adhesive	Silica Filler	7631-86-9		0.353	mg	200000	12868
				supplier	adhesive	Silicon dioxide	67762-90-7		0.053	mg	30000	1930
				supplier	adhesive	Carbon black	1333-86-4		0.018	mg	10000	643
Filter attach	M-015 Other organic materials	0.300	mg	supplier	adhesive	Bisphenol F type liquid epoxy resin	9003-36-5		0.045	mg	150000	1641
				supplier	adhesive	Bisphenol A type liquid epoxy resin	25068-39-6		0.045	mg	150000	1641
				supplier	adhesive	Glycidyl compound	16096-31-4		0.009	mg	30000	328
				supplier	adhesive	Mercapto compound	Proprietary		0.009	mg	30000	328
				supplier	adhesive	Hardener	Proprietary		0.006	mg	20000	219
				supplier	adhesive	Accelerator	Proprietary		0.005	mg	15000	164
				supplier	adhesive	Modified acrylic resin	Proprietary		0.015	mg	50000	547
				supplier	adhesive	Silane coupling agent	Proprietary		0.002	mg	5000	55
				supplier	adhesive	Silica (amorphous)	Proprietary		0.156	mg	520000	5690
				supplier	adhesive	Fumed silica (amorphous)	Proprietary		0.006	mg	20000	219
Lid	M-014 Other plastics and rubber	12.912	mg	supplier	adhesive	Carbon black	1333-86-4		0.003	mg	10000	109
				supplier	plastic lid	Liquid crystal polymers / LCP	Proprietary		7.295	mg	565000	266089
				supplier	plastic lid	Talc	14807-96-6		3.228	mg	250000	117738
				supplier	plastic lid	Glass fiber	65997-17-3		1.937	mg	150000	70643
				supplier	plastic lid	Carbon black	1333-86-4		0.387	mg	30000	14128
Filter	M-011 Other inorganic materials	0.913	mg	supplier	plastic lid	Additives	Proprietary		0.065	mg	5000	2355
				supplier	filter	Silicon, Plate	7440-21-3		0.822	mg	900000	29970
				supplier	filter	Germanium, Coated	7440-56-4		0.046	mg	50000	1665
supplier	filter	Zinc sulfide, Coated	1314-98-3		0.046	mg	50000	1665				