



## Material declaration form

General information			
IPC	1752	Version	2
Form type*	Distribute		
Sectionals*	Material information	Subsectionals*	A-D
	Manufacturing information		

Supplier information			
Company name*	STMicroelectronics	Response date*	2023-01-18
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>		

**Uncertainty statement**

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**Legal statement**

Supplier acceptance *	true	Legal declaration*	Standard
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				
Manufacturing item number	Manufacturing item name	Version	Manufacturing site	Date
	N7GG*MY1ZAAA	A	997G	2023-01-18
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	27.8	mg	Each	ECOPACK® 2

Manufacturing information			
J-STD-020 MSL rating	Classification temperature	Number of reflow cycles	
3	260	3	
Bulk solder termination	Terminal plating	Terminal base alloy	Comment
NAC	Nickel/Gold (Ni/Au), electrolytic	Copper Alloy	0
Package designator	Package Size	Number of instances	Shape
LGA	2.8 x 2.8	6+1	Flat
<b>Comment</b>	B0DZ CERAMIC CCLGA 2.8X2.8X2.1 6L+1; MDF is valid for ILPS28QSWTR		





QueryList : Korea Chemical Control Act_ 27 Dec 2017 update				Response
The Product does contain at least one of the substances listed in Chemical Control Act				false

QueryList : Responsible metals sourcing			Response
The component is containing at least one of the following metals : Cobalt , Gold , Tantalum , Tin , Tungsten.			true

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

QueryList:Stockholm Convention Persistent Organic Pollutants		Response
Product is compliant with Stockholm Convention Persistent Organic Pollutants Annex I		true



Material composition declaration : note : Substance present with less 0.001mg will not be declared in this document						Manufacturing Item name	N7GG*MY1ZAAA		27.8676		7990298.0	1002431.0
Homogeneous material	Material group	Mass	Unit of measure	Level	Substance category	Substance	CAS	Exempt	Mass	Unit of measure	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Dies	M-011 Other inorganic materials	0.697	mg	supplier	die	Silicon(Si)	7440-21-3		0.638	mg	915352	22950
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.006	mg	8608	216
				supplier	metallisation	Copper(Cu)	7440-50-8		0.017	mg	24390	612
				supplier	metallisation	Tantalum(Ta)	7440-25-7		0.003	mg	4304	108
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.002	mg	2869	72
				supplier	Passivation	Silicon Nitride (SiN)	12033-89-5		0.006	mg	8608	216
				supplier	passivation	Silicon Oxide	7631-86-9		0.025	mg	35868	899
				supplier	laminante	Aluminum oxide	1344-28-1		8.884	mg	824348	319568
				supplier	laminante	Silicon Dioxide	7631-86-9		0.540	mg	50107	19424
				supplier	laminante	Calcium Oxide	1305-78-8		0.065	mg	6031	2338
Substrate	M-015 Other organic materials	10.777	mg	supplier	laminante	Magnesium Oxide	1309-48-4		0.054	mg	5011	1942
				supplier	laminante	Titanium oxide	13463-67-7		0.108	mg	10021	3885
				supplier	laminante	Chromium Oxide	1308-38-9		0.324	mg	30064	11655
				supplier	laminante	Nickel(Ni)	7440-02-0		0.043	mg	3990	1547
				supplier	laminante	Gold(Au)	7440-57-5		0.002	mg	186	72
				supplier	laminante	Palladium(Pd)	7440-05-3		0.001	mg	93	36
				supplier	laminante	Tungsten(W)	7440-33-7		0.648	mg	60128	23309
				supplier	laminante	Molybdenum	7439-98-7		0.108	mg	10021	3885
				supplier	glue	Epoxy acrylic resin	29690-82-2		0.322	mg	700210	11586
				supplier	glue	Acrylic resin	Proprietary		0.136	mg	295088	4883
Die attach	M-015 Other organic materials	0.460	mg	supplier	glue	Additive	Proprietary		0.002	mg	5001	83
				supplier	glue	Dimethyl siloxane, dimethylvinylsiloxy- terminatec	68083-19-2		0.386	mg	925000	13875
				supplier	glue	Hexamethyldisilazane	68909-20-6		0.029	mg	70000	1050
Die attach 2	M-015 Other organic materials	0.417	mg	supplier	glue	Dimethyl, Methylhydrogen siloxane, hydrogen- te	63148-57-2		0.002	mg	5000	75
				supplier	wire	Gold(Au)	7440-57-5		0.055	mg	990000	1980
Bonding wire	M-008 Precious metals	0.056	mg	supplier	wire	Gold(Au)	7440-57-5		0.055	mg	990000	1980
Potting gel	M-015 Other organic materials	5.784	mg	supplier	resin	Perfluoropolyether mixture	Proprietary		2.892	mg	499994	104026
				supplier	resin	Other	Proprietary		2.892	mg	500006	104029
Lid adhesive	M-015 Other organic materials	0.139	mg	supplier	glue	Silver (Ag)	7440-22-4		0.118	mg	850000	4250
				supplier	glue	bisphenol-F-(epichlorhydrin)	9003-36-5		0.004	mg	30000	150
				supplier	glue	Epoxy Resin	Proprietary		0.004	mg	30000	150
				supplier	glue	1,4-Bis(2,3-epoxypropoxy)butane	2425-79-8		0.004	mg	30000	150
				supplier	glue	Poly[oxy(methyl-1,2-ethanediy)], a-(2-aminomet	9046-10-0		0.004	mg	30000	150
				supplier	glue	4-Methyl-2-phenyl-1H-imidazole	827-43-0		0.004	mg	30000	150
Lid	M-011 Other inorganic materials	9.538	mg	supplier	Metal Cap	Iron (Fe)	7439-89-6		7.426	mg	778500	267111
				supplier	Metal Cap	Nickel (Ni)	7440-02-0		0.882	mg	92500	31738
				supplier	Metal Cap	Chromium (Cr)	7440-47-3		1.040	mg	109000	37399
				supplier	Metal Cap	Manganese (Mn)	7439-96-5		0.191	mg	20000	6862