



## 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*	2023-12-13
Contact name*	Refer to Supplier Comment section		Refer to Supplier Comment section
Contact phone*	Refer to Supplier Comment section	Contact email*	Refer to Supplier Comment section
Authorized representative*	giovanni giacopello	Representative title	ADGMaterial 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 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	Manufacturing site	date
STGIF7CH60TS-X	IXZ3*RI6CN82	A	3068	2023-12-13
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	8600.00	mg	Each	ECOPACK® 2
<b>Identity</b>	<b>Authority</b>			
Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant ( in each organic material)			

Manufacturing information				
J-STD-020 MSL rating	Classification temperature	Number of reflow cycles		
Not Applicable	Not Applicable	,		
Bulk solder termination	Terminal plating	Terminal base alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM01030371	
Package designator	Package size	Number of instances	Shape	
DIP	38.00x24.00x3.50	26	Through-hole	
Comment	SDIP2F			



QueryList : RoHS Directive 2011/65/EU- 8 June 2011 – Annex II amended by Delegated Directive 2015/863 - 31 March 2015			Response
1 - Product(s) meets EU RoHS requirement without any exemptions			true
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)			false
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions			false
Exemption Id.	Description		

QueryList : ELV directive : 2000/53/EC amended 2020/363_March 2020			Response
1 - Product(s) meets EU ELV requirements without any exemptions			true
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)			false
Exemption Id.	Description		
10(a)	10(a) - 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 25th Feb 2022				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				true
Substance	amount in product (mg)	Application	ppm in product	
Nickel	4.671	die - ntc	543	

QueryList : REACH-14th June 2023				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 Embedded article nor Homogeneous Material above the limits per the definition within REACH				true
CategoryLevel_Name	CategoryLevel_Threshold	Amount in embedded article / Homogeneous material (mg)	Application - article / Homogeneous material	ppm in article /Homogeneous material

QueryList : Responsible metals sourcing		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, Tin, Tungsten,

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 : 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		true

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

QueryList : EUSRR Directive		Response
Product contains hazardous materials listed in EUSRR Annex II		False

PFAS/PTFE Restriction		Response
Product contains Per- and Polyfluorinated Substance		False

BPA Restriction		Response
Product contains Bisphenol A (Isopropylidenediphenol)		False



Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	IXZ3'R6CN82									
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	60.732	mg	supplier	die	Silicon(Si)	7440-21-3		57.491	mg	946634	6682				
				supplier	metallisation	Aluminium(Al)	7429-90-5		1.264	mg	20813	147				
				supplier	metallisation	Chromium(Cr)	7440-47-3		0.006	mg	99	1				
				supplier	metallisation	Gold(Au)	7440-57-5		0.080	mg	1317	9				
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.531	mg	8743	62				
				supplier	metallisation	Silver(Ag)	7440-22-4		0.229	mg	3771	27				
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.056	mg	922	7				
				supplier	metallisation	Tungsten(W)	7440-33-7		0.246	mg	4051	29				
				supplier	metallisation	Vanadium(V)	7440-62-2		0.011	mg	181	1				
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.023	mg	379	3				
				supplier	passivation	Silicon oxide	7631-86-9		0.508	mg	8365	59				
				supplier	polymer coating	Durimide	proprietary		0.269	mg	4429	31				
				supplier	polymer coating	polyimide	proprietary		0.018	mg	296	2				
				Leadframe	M-004 Copper and its alloys	2870.858	mg	supplier	alloy	Copper (Cu)	7440-50-8		2794.658	mg	973456	324960
								supplier	alloy	Iron (Fe)	7439-89-6		65.730	mg	22896	7643
supplier	alloy	Iron Phosphide (FeP)	26508-33-8						3.958	mg	1379	460				
supplier	alloy	Zinc (Zn)	7440-66-6						3.441	mg	1199	400				
supplier	metallization	Silver (Ag)	7440-22-4						3.071	mg	1070	357				
Die attach	M-011 Other inorganic materials	0.732	mg	supplier	glue	Silver(Ag)	7440-22-4		0.556	mg	759562	65				
				supplier	glue	Oxiranylmethoxy-phenyl-methylene-bisoxirane	13561-08-5		0.088	mg	120219	10				
				supplier	glue	Phenol resin	9003-35-4		0.022	mg	30055	3				
				supplier	glue	Epoxypropoxy butane polymer	2425-79-8		0.022	mg	30055	3				
				supplier	glue	Diglycidyl phenyl allyl ether	EC417-470-1		0.037	mg	50546	4				
				supplier	glue	Polyoxypropylenediamine	9046-10-6		0.007	mg	9563	1				
Soft solder	Solder	12.447	mg	supplier	solder	Tin(Sn)	7440-31-5		12.011	mg	964971	1397				
				supplier	solder	Silver(Ag)	7440-22-4		0.436	mg	35029	51				
Bonding wires	M-003 Aluminum and its alloys	17.878	mg	supplier	wire	Aluminium (Al)	7429-90-5		17.878	mg	1000000	2079				
Bonding wires 2	M-004 Copper and its alloys	0.272	mg	supplier	wire	Copper(Cu)	7440-50-8		0.272	mg	1000000	32				
Encapsulation	M-011 Other inorganic materials	5575.186	mg	supplier	mold compound	Silica vitreous	60676-86-0		836.278	mg	150000	97242				
				supplier	mold compound	Epoxy resin	25068-38-6		334.511	mg	60000	38897				
				supplier	mold compound	Phenol resin	29690-82-2		418.139	mg	75000	48621				
				supplier	mold compound	Silicon Dioxide	7631-86-9		167.256	mg	30000	19448				
				supplier	mold compound	Quartz	14808-60-7		3791.126	mg	680000	440829				
supplier	mold compound	Carbon Black	1333-86-4		27.876	mg	5000	3241								
Connections coating	Solder	55.236	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		55.236	mg	1000000	6423				
NTC	M-010 Ceramics / glass	6.660	mg	supplier	metallization	Silver (Ag)	7440-22-4		1.710	mg	256756	199				
				supplier	ceramic	Dopants	proprietary		0.810	mg	121622	94				
				supplier	ceramic	Nickel oxide	1313-99-1		4.140	mg	621622	481				