



## 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*	2024-05-14
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*	gregorio duro	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
STH65N050DM9-7AG	T28P*P9FLQ52	A	3068	2024-05-14
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	1540.00	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 ( in each organic material)			

Manufacturing information				
J-STD-020 MSL rating	Classification temperature	Number of reflow cycles		
1	245	3		
Bulk solder termination	Terminal plating	Terminal base alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM01014365	
Package designator	Package size	Number of instances	Shape	
Not Applicable	10.20x9.15x4.50	7	0	
Comment	H2PAK-7			

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		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	
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)	

QueryList : ELV directive : 2000/53/EC amended 2020/363_March 2020		Response
1 - Product(s) meets EU ELV requirements without any exemptions		False
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)		True
Exemption Id.	Description	
8(e)	8(e) - Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)	

QueryList : California Prop65 list, dated 17th Nov 2023			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	1.324	die - leadframe	860
Lead	11.520	soft solder	7481

QueryList : REACH-23rd January 2024				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 ppm	11.520	Soft solder	7481
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				False
CategoryLevel_Name	CategoryLevel_Threshold	Amount in embedded article / Homogeneous material (mg)	Application - article / Homogeneous material	ppm in article /Homogeneous material
Lead	1000 ppm	11.520	Soft solder	954986



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 :	Tin,

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	False

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	True
The material present in the product is:	Lead

PFAS/PTFE Declaration	Response
The product is containing at least one of the following PFAS substance: Polytetrafluoroethylene,Thiophenium, Triphenylsulfonium nonaflate, Trifluoroacetic anhydride	False

BPA Declaration	Response
Product does not contain Bisphenol A (Isopropylidenediphenol)	True

Montreal Protocol	Response
Product does not contain Ozone Depleting Substances based on Annex I to Annex VII of EU REGULATION (EC) No 1005/2009	True

Environmental Protection Agency:Toxic Substances Control Act (TSCA). Section 6(h)	Response
Product does not contain Phenol, isopropylated, phosphate (3:1)	True



Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	T28P*P9FLQ52									
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)				
Die	M-011 Other inorganic materials	9.703	mg	supplier	die	Silicon(Si)	7440-21-3		8.901	mg	917345	5781				
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.441	mg	45450	286				
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.133	mg	13707	86				
				supplier	metallisation	Silver(Ag)	7440-22-4		0.055	mg	5668	36				
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.011	mg	1134	7				
				supplier	metallisation	Vanadium(V)	7440-62-2		0.010	mg	1031	6				
				supplier	passivation	Silicon oxide	7631-86-9		0.152	mg	15665	99				
				Leadframe	M-004 Copper and its alloys	1031.008	mg	supplier	alloy	Copper(Cu)	7440-50-8		1028.454	mg	997523	667827
								supplier	alloy	Iron phosphide	26508-33-8		0.865	mg	839	562
supplier	alloy	Iron(Fe)	7439-89-6						0.474	mg	460	308				
supplier	metallization	Nickel (Ni)	7440-02-0						1.191	mg	1155	773				
supplier	metallization	Phosphorus (P)	7723-14-0						0.024	mg	23	16				
Soft solder	Solder	12.063	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temperat	11.520	mg	954987	7481				
				supplier	solder	Silver(Ag)	7440-22-4		0.302	mg	25035	196				
				supplier	solder	Tin(Sn)	7440-31-5		0.241	mg	19978	156				
Bonding wires	M-003 Aluminum and its alloys	1.539	mg	supplier	wire	Aluminium (Al)	7429-90-5		1.539	mg	1000000	999				
Bonding wires 2	M-003 Aluminum and its alloys	0.158	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.157	mg	993671	102				
Encapsulation	M-011 Other inorganic materials	483.253	mg	supplier	wire	Magnesium (Mg)	7439-95-4		0.001	mg	8329	1				
				supplier	mold compound	Silica vitreous	60676-86-0		422.846	mg	874999	274575				
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		19.330	mg	40000	12552				
				supplier	mold compound	Epoxy type resin	25068-38-6		14.498	mg	30001	9414				
				supplier	mold compound	Phenol type resin	29690-82-2		24.163	mg	50001	15690				
Connections coating	Solder	2.276	mg	supplier	mold compound	Carbon black	1333-86-4		2.416	mg	4999	1569				
				supplier	solder alloy	Tin (Sn)	7440-31-5		2.276	mg	1000000	1478				