



## Material declaration form

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

\*: Required Field

Supplier Information			
Company name*	STMicroelectronics	Response Date*	2023-09-04
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*	Legal declaration*	Standard
true		

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
STPS40150CGY-TR	CSD2*Z19PA2X	A	3068	2023-09-04
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	1480.00	mg	Each	ECOPACK® 1
<b>Identity</b>	<b>Authority</b>			
Comment	ECOPACK® or ECOPACK® 1 is STMicroelectronics trade name for ROHS compliant devices			

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	DM00493480	
Package designator	Package size	Number of instances	Shape	
SIP	10.20x9.15x4.50	3	Gull wing	
Comment	D2PAK			

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 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	1.088	die - leadframe	735	
Lead	7.155	soft solder	4834	
Antimony trioxide	8.017	encapsulation	5417	

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					false
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product	
Lead	1000 ppm	7.16	Soft solder	4834	
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	7.16	Soft solder	955019	

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 :		<b>Gold, Tin, Tungsten,</b>

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		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

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
		Lead

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	CSD2*Z19FA2X					
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	13.909	mg	supplier	die	Silicon(Si)	7440-21-3		13.471	mg	968510	9102
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.084	mg	6039	57
				supplier	metallisation	Gold(Au)	7440-57-5		0.080	mg	5752	54
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.153	mg	11000	103
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.019	mg	1366	13
				supplier	metallisation	Tungsten(W)	7440-33-7		0.020	mg	1438	14
				supplier	passivation	Silicon oxide	7631-86-9		0.082	mg	5895	55
Leadframe	M-004 Copper and its alloys	779.498	mg	supplier	alloy	Copper(Cu)	7440-50-8		777.532	mg	997479	525359
				supplier	alloy	Iron phosphide	26508-33-8		0.654	mg	839	442
				supplier	alloy	Iron(Fe)	7439-89-6		0.358	mg	459	242
				supplier	metallization	Nickel (Ni)	7440-02-0		0.935	mg	1199	632
				supplier	metallization	Phosphorus (P)	7723-14-0		0.019	mg	24	13
Soft solder	Solder	7.492	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	7.155	mg	955019	4834
				supplier	solder	Silver(Ag)	7440-22-4		0.187	mg	24960	126
				supplier	solder	Tin(Sn)	7440-31-5		0.150	mg	20021	101
Bonding Ribbons	M-003 Aluminum and its alloys	8.528	mg	supplier	ribbon	Aluminium (Al)	7429-90-5		8.528	mg	1000000	5762
Encapsulation	M-011 Other inorganic materials	668.084	mg	supplier	mold compound	Silica vitreous	60676-86-0		549.833	mg	823001	371509
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		46.766	mg	70000	31599
				supplier	mold compound	Phenol resin	9003-35-4		26.723	mg	39999	18056
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		20.043	mg	30001	13543
				supplier	mold compound	Antimony trioxide	1309-64-4		8.017	mg	12000	5417
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		13.362	mg	20000	9028
				supplier	mold compound	Carbon black	1333-86-4		3.340	mg	4999	2257
Connections coating	Solder	2.489	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.489	mg	1000000	1682