



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*	2023-10-27
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 : http://www.st.com/web/en/support/support.html		

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
SOD123-FLAT NEP	1F146584	A	996I	2023-10-27
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	12.50	mg	Each	ECOPACK® 2
Identity	Authority			
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	260	3		
Bulk solder termination	Terminal plating	Terminal base alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM01006216	
Package designator	Package size	Number of instances	Shape	
CHP	2.60x1.60x0.98	2	L bend	
Comment	MDF representative for CP: STTH1R02ZF;STTH1R02ZFY;STPS2H100ZF;STPS2H100ZFY;STPS1L60ZF;STPS1L40ZF;STPS1L60ZFY;STPS2L60ZFY;STPS1L40ZFY;STPS2L40ZFY;STPS1H100ZF;STPST1H100ZFY;STPST2H100ZF;STPST2H100ZFY			



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	0.007	die	560
Lead	0.369	soft solder	29520

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	0.37	Soft solder	29520
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	0.37	Soft solder	946154

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		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	1F146584									
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	0.490	mg	supplier	die	Silicon(Si)	7440-21-3		0.457	mg	932653	36560				
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.004	mg	8163	320				
				supplier	metallisation	Gold(Au)	7440-57-5		0.004	mg	8163	320				
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.007	mg	14286	560				
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.001	mg	2041	80				
				supplier	metallisation	Tungsten(W)	7440-33-7		0.001	mg	2041	80				
				supplier	passivation	Silicon oxide	7631-86-9		0.004	mg	8163	320				
				supplier	polymer coating	Durimide	proprietary		0.012	mg	24490	960				
				Leadframe	M-004 Copper and its alloys	4.486	mg	supplier	alloy	Copper(Cu)	7440-50-8		4.480	mg	998662	358400
								supplier	alloy	Iron(Fe)	7439-89-6		0.005	mg	1115	400
supplier	alloy	Iron phosphide	26508-33-8						0.001	mg	223	80				
Soft solder	Solder	0.390	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temperat	0.369	mg	946154	29520				
				supplier	solder	Tin(Sn)	7440-31-5		0.019	mg	48718	1520				
				supplier	solder	Flux residue	proprietary		0.002	mg	5128	160				
Encapsulation	M-011 Other inorganic materials	5.222	mg	supplier	mold compound	Silica vitreous	60676-86-0		3.734	mg	715051	298720				
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		0.627	mg	120069	50160				
				supplier	mold compound	Phenol resin	9003-35-4		0.313	mg	59939	25040				
				supplier	mold compound	Aluminium hydroxide	21645-51-2		0.522	mg	99962	41760				
				supplier	mold compound	Carbon black	1333-86-4		0.026	mg	4979	2080				
Connections coating	Solder	0.166	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.166	mg	1000000	13280				
Clip	M-004 Copper and its alloys	1.746	mg	supplier	alloy	Copper(Cu)	7440-50-8		1.743	mg	998282	139440				
				supplier	alloy	Iron(Fe)	7439-89-6		0.002	mg	1145	160				
				supplier	alloy	Iron phosphide	26508-33-8		0.001	mg	573	80				