



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
SM6F10AY	A93E*YFU012D	A	996I	2023-10-27
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	28.00	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	DM01006244	
Package designator	Package size	Number of instances	Shape	
CHP	3.80x2.40x0.98	2	I bend	
Comment	SOD128-FLAT NEP			



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	0.023	die	821
Lead	0.786	soft solder	28071

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	0.79	Soft solder	28071
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	0.79	Soft solder	925795

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,

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 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	A93E*YFU012D					
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	1.337	mg	supplier	die	Silicon(Si)	7440-21-3		1.258	mg	940912	44929
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.024	mg	17951	857
				supplier	metallisation	Gold(Au)	7440-57-5		0.011	mg	8227	393
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.023	mg	17203	821
				supplier	passivation	Silicon oxide	7631-86-9		0.007	mg	5236	250
				supplier	polymer coating	Durimide	proprietary		0.014	mg	10471	500
Leadframe	M-004 Copper and its alloys	11.169	mg	supplier	alloy	Copper(Cu)	7440-50-8		11.155	mg	998746	398393
				supplier	alloy	Iron(Fe)	7439-89-6		0.011	mg	985	393
				supplier	alloy	Iron phosphide	26508-33-8		0.003	mg	269	107
Soft solder	Solder	0.849	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temperat	0.786	mg	925795	28071
				supplier	solder	Tin(Sn)	7440-31-5		0.042	mg	49470	1500
				supplier	solder	Silver(Ag)	7440-22-4		0.021	mg	24735	750
Encapsulation	M-011 Other inorganic materials	10.399	mg	supplier	mold compound	Silica vitreous	60676-86-0		7.435	mg	714972	265536
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		1.248	mg	120012	44571
				supplier	mold compound	Phenol resin	9003-35-4		0.624	mg	60006	22286
				supplier	mold compound	Aluminium hydroxide	21645-51-2		1.040	mg	100010	37143
				supplier	mold compound	Carbon black	1333-86-4		0.052	mg	5000	1857
Connections coating	Solder	0.296	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.296	mg	1000000	10571
Clip		3.950	mg	supplier	alloy	Copper(Cu)	7440-50-8		3.945	mg	998734	140893
				supplier	alloy	Iron(Fe)	7439-89-6		0.004	mg	1013	143
				supplier	alloy	Iron phosphide	26508-33-8		0.001	mg	253	36