



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*	2023-10-05
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
STGHU30M65DF2AG	XDCH*KLF5Q51	A	64BA	2023-10-05
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	2320.00	mg	Each	ECOPACK® 1
Identity	Authority			
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	260	3		
Bulk solder termination	Terminal plating	Terminal base alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00920259	
Package designator	Package size	Number of instances	Shape	
CHP	14.00x11.80x3.50	9	Gull wing	
Comment	HU3PAK			

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	11.178	die - leadframe	4818
Lead	8.260	soft solder	3560
Antimony trioxide	8.867	encapsulation	3822

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	8.26	Soft solder	3560
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	8.26	Soft solder	955024

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	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	XDC#KLF5Q51					
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	7.943	mg	supplier	die	Silicon(Si)	7440-21-3		7.107	mg	894751	3066
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.310	mg	39028	134
				supplier	metallisation	Copper(Cu)	7440-50-8		0.003	mg	378	1
				supplier	metallisation	Gold(Au)	7440-57-5		0.015	mg	1888	6
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.142	mg	17877	61
				supplier	metallisation	Silver(Ag)	7440-22-4		0.052	mg	6547	22
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.028	mg	3525	12
				supplier	metallisation	Vanadium(V)	7440-62-2		0.006	mg	755	3
				supplier	passivation	Silicon oxide	7631-86-9		0.110	mg	13849	47
				supplier	polymer coating	Durimide	proprietary		0.170	mg	21402	73
Leadframe	M-004 Copper and its alloys	1542.398	mg	supplier	alloy	Copper(Cu)	7440-50-8		1528.099	mg	990730	658663
				supplier	alloy	Iron phosphide	26508-33-8		1.285	mg	833	554
				supplier	alloy	Iron(Fe)	7439-89-6		0.704	mg	456	303
				supplier	metallization	Nickel (Ni)	7440-02-0		11.036	mg	7155	4757
				supplier	metallization	Phosphorus (P)	7723-14-0		1.274	mg	826	549
Soft solder	Solder	8.649	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temperat	8.260	mg	955024	3560
				supplier	solder	Silver(Ag)	7440-22-4		0.216	mg	24974	93
				supplier	solder	Tin(Sn)	7440-31-5		0.173	mg	2002	75
Bonding wires	M-003 Aluminum and its alloys	4.876	mg	supplier	wire	Aluminium (Al)	7429-90-5		4.876	mg	1000000	2102
Bonding wires 2	M-003 Aluminum and its alloys	0.106	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.105	mg	990566	45
				supplier	wire	Magnesium (Mg)	7439-95-4		0.001	mg	9434	0
Encapsulation	M-011 Other inorganic materials	738.933	mg	supplier	mold compound	Silica vitreous	60676-86-0		608.142	mg	823000	262130
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		51.725	mg	70000	22295
				supplier	mold compound	Phenol resin	9003-35-4		29.557	mg	40000	12740
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		22.168	mg	30000	9555
				supplier	mold compound	Antimony trioxide	1309-64-4		8.867	mg	12000	3822
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		14.779	mg	20000	6370
				supplier	mold compound	Carbon black	1333-86-4		3.695	mg	5000	1593
Connections coating	Solder	17.095	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		17.095	mg	1000000	7369