



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*	2023-11-02
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 : 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
SCT040W120G3-4	T3TM*BRI9BVF	A	998G	2023-11-02
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	6080.00	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		
Not Applicable	Not Applicable	,		
Bulk solder termination	Terminal plating	Terminal base alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00981968	
Package designator	Package size	Number of instances	Shape	
SIP	15.80x21.00x5.00	4	Through-hole	
Comment	TO247-4			



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	17.745	die - leadframe	2919
Lead	3.319	soft solder	546

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		true		
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
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	3.32	Soft solder	954833

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
		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	T3TM*BR19BVF					
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	5.985	mg	supplier	die	Silicium carbide	409-21-2		5.547	mg	926817	911
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.101	mg	16876	17
				supplier	metallisation	Silicon(Si)	7440-21-3		0.024	mg	4010	4
				supplier	metallisation	Copper(Cu)	7440-50-8		0.014	mg	2339	2
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.087	mg	14536	14
				supplier	metallisation	Silver(Ag)	7440-22-4		0.089	mg	14871	15
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.011	mg	1838	2
				supplier	metallisation	Vanadium(V)	7440-62-2		0.003	mg	501	0
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.016	mg	2673	3
				supplier	passivation	Silicon oxide	7631-86-9		0.027	mg	4511	4
				supplier	polymer coating	polyimide	proprietary		0.066	mg	11028	11
				Leadframe	M-004 Copper and its alloys	4777.382	mg	supplier	alloy	Copper(Cu)	7440-50-8	
supplier	alloy	Iron phosphide	26508-33-8						3.996	mg	836	657
supplier	alloy	Iron(Fe)	7439-89-6						2.188	mg	458	360
supplier	metallization	Nickel (Ni)	7440-02-0						17.658	mg	3696	2904
supplier	metallization	Phosphorus (P)	7723-14-0						2.612	mg	547	430
Soft solder	Solder	3.476	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temperat	3.319	mg	954833	546
				supplier	solder	Tin(Sn)	7440-31-5		0.070	mg	20138	12
				supplier	solder	Silver(Ag)	7440-22-4		0.087	mg	25029	14
Bonding wires	M-003 Aluminum and its alloys	0.323	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.323	mg	1000000	53
Bonding wires 2	M-003 Aluminum and its alloys	1.213	mg	supplier	wire	Aluminium (Al)	7429-90-5		1.213	mg	1000000	200
Encapsulation	M-011 Other inorganic materials	1285.424	mg	supplier	mold compound	Silica vitreous	60676-86-0		1006.487	mg	783000	165541
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		192.814	mg	150000	31713
				supplier	mold compound	Phenol resin	9003-35-4		64.271	mg	50000	10571
				supplier	mold compound	Triphenylphosphine	603-35-0		10.283	mg	8000	1691
				supplier	mold compound	Bismuth compound	7440-69-9		5.142	mg	4000	846
				supplier	mold compound	Carbon black	1333-86-4		6.427	mg	5000	1057
Connections coating	Solder	6.197	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.197	mg	1000000	1019