



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*	2024-11-27
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*	Antonella Lanzafame	Representative title	APMSMaterial 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
SCT019W120G3-4AG	T3TM*BRIGAVF	A	Z8GA	2024-11-27
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	6080	mg	Each	ECOPACK® 3
Identity	Authority			
Comment	ECOPACK® 3 is STMicroelectronics trade name for ROHS compliant device without use of any ROHS exemption and without Halogen nor Antimony			

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	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy	0

Package designator	Package size	Number of instances	Shape
DIP	15.8x21	4	gull wing
Comment			
Comment	A0TM 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	true
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
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 17th Nov 2023	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	1.578	alloy	260
Lead	2.271	solder	374

QueryList :Customer	Response
QUERY	Response

QueryList : Chinese RoHS , references : SJT 11364 – 2014 and GBT 26572 – 2014	Response			
QUERY	Response			
1 - Product(s) requires marking for the presence of restricted substances and must be marked with an Environmental Protection Use Period under China's Measures for Administration of the control of pollution by Electronic Information Products	true			
2 - Product(s) is eligible for marking with the e code under China's Measures for Administration of the control of pollution by Electronic Information Products	false			
Hazardous substance				
Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	Hexavalent Chromium (Cr VI)	PBB & PBDE
X	O	O	O	O
Die attach				
Homogeneous Material(s) containing Lead				

QueryList : REACH-7th November 2024	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				true
CategoryLevel_Name	CategoryLevel_Threshold	Amount in embedded article / Homogeneous material (mg)	Application - article / Homogeneous material	ppm in article /Homogeneous material



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

QueryList:Stockholm Convention Persistent Organic Pollutants (POP)	Response
Product is compliant with Annex A, B and C of Stockholm Convention Persistent Organic Pollutants	true

QueryList: EU Ship Recycling Regulation No. 1257/2013	Response
Product contains hazardous materials listed in Annex II of EU Ship Recycling Regulation No.1257/2013 and 2009/16/EC Directive	True
The material present in the product is:	Lead

PFAS/PTFE Declaration	Response
The product is containing at least one of the following PFAS substance: Polytetrafluoroethylene,Thiophenium, Triphenylsulfonium nonaflate, Trifluoroacetic anhydride	False

BPA Declaration	Response
Product does not contain Bisphenol A (Isopropylidenediphenol)	True

Montreal Protocol	Response
Product does not contain Ozone Depleting Substances based on Annex I to Annex VII of EU REGULATION (EC) No 1005/2009	True

Environmental Protection Agency:Toxic Substances Control Act (TSCA). Section 6(h)	Response
Product does not contain Phenol, isopropylated, phosphate (3:1)	True



Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	T3TM*BRIGAVF		6079.9996		7000000.0	1000000.0	
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	10.463	mg	supplier	die	Silicon(Si)	7440-21-3		0.043	mg	4110	7	
				California 65	die	Silicium carbide	409-21-2		9.808	mg	937398	1613	
		supplier	metallisation	Aluminium(Al)	7429-90-5		0.179	mg	17108	29			
		supplier	metallisation	Copper(Cu)	7440-50-8		0.024	mg	2294	4			
		supplier	metallisation	Nickel(Ni)	7440-02-0		0.153	mg	14623	25			
		supplier	metallisation	Silver(Ag)	7440-22-4		0.157	mg	15005	26			
		supplier	metallisation	Titanium(Ti)	7440-32-6		0.018	mg	1720	3			
		supplier	metallisation	Vanadium(V)	7440-62-2		0.005	mg	478	1			
		supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.029	mg	2772	5			
		supplier	passivation	Silicon oxide	7631-86-9		0.047	mg	4492	8			
	Leadframe	M-004 Copper and its alloys	4750.879	mg	supplier	alloy	Copper (Cu)	7440-50-8		4743.753	mg	998500	780223
					supplier	alloy	Iron (Fe)	7439-89-6		4.751	mg	1000	781
					supplier	alloy	Phosphorous	13598-36-2		0.950	mg	200	156
supplier					alloy	Nickel(Ni)	7440-02-0		1.425	mg	300	234	
Die attach	M-011 Other inorganic materials	2.416	mg	SVHC	glue	Lead (Pb)	7439-92-1	7a-Lead in high melting temper	2.271	mg	940000	374	
				supplier	glue	Silver (Ag)	7440-22-4		0.072	mg	30000	12	
				supplier	glue	Tin(Sn)	7440-31-5		0.072	mg	30000	12	
Bonding wires	M-003 Aluminum and its alloys	13.874	mg	supplier	wire	Aluminum (Al)	7429-90-5		13.874	mg	1000000	2282	
Bonding wires 2	M-003 Aluminum and its alloys	26.629	mg	supplier	wire	Aluminum (Al)	7429-90-5		26.629	mg	1000000	4380	
Encapsulation	M-011 Other inorganic materials	1232.560	mg	supplier	mold compound	Silica	60676-86-0		943.649	mg	765601	155205	
				supplier	mold compound	Epoxy Resin	29690-82-2		140.590	mg	114063	23123	
				supplier	mold compound	Phenol Resin	Proprietary		105.442	mg	85547	17342	
				supplier	mold compound	Fire Retardant	Proprietary		35.147	mg	28516	5781	
				supplier	mold compound	Carbon black	1333-86-4		7.732	mg	6273	1272	
Connections coating	Solder	43.179	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		43.179	mg	1000000	7102	