



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*	2024-11-26
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

While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.

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
SCT018HU65G3AG	T3CH*BRFC1V7	A	Z9VA	2024-11-26
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	2320	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	0

Package designator	Package size	Number of instances	Shape
DIP	14x11.8	9	gull wing
Comment	B0CH 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		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	13.137	alloy	5663	
Lead	2.403	solder	1036	
Antimony trioxide	9.130	molding	3935	

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					false
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	



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	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

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	T3CH*BRFC1V7		2320.0000		6000000.0	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	8.013	mg	supplier	die	Silicon(Si)	7440-21-3		0.033	mg	4118	14			
	M-011 Other inorganic materials			California 65	die	Silicium carbide	409-21-2		7.511	mg	937352	3238			
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.137	mg	17097	59			
				supplier	metallisation	Copper(Cu)	7440-50-8		0.019	mg	2371	8			
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.118	mg	14726	51			
				supplier	metallisation	Silver(Ag)	7440-22-4		0.120	mg	14976	52			
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.014	mg	1747	6			
				supplier	metallisation	Vanadium(V)	7440-62-2		0.004	mg	499	2			
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.022	mg	2746	9			
				supplier	passivation	Silicon oxide	7631-86-9		0.035	mg	4368	15			
	Leadframe			M-004 Copper and its alloys	1531.699	mg	supplier	alloy	Copper (Cu)	7440-50-8		1515.643	mg	989518	653294
							supplier	alloy	Iron(Fe)	7439-89-6		2.278	mg	1487	982
							supplier	alloy	Phosphorus(P)	7723-14-0		0.759	mg	496	327
Die attach	M-011 Other inorganic materials	2.516	mg	SVHC	glue	Nickel (Ni)	7440-02-0		13.019	mg	8500	5612			
				supplier	glue	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	2.403	mg	955087	1036			
				supplier	glue	Tin(Sn)	7440-31-5		0.050	mg	19873	22			
Bonding wires	M-003 Aluminum and its alloys	3.177	mg	supplier	wire	Silver(Ag)	7440-22-4		0.063	mg	25040	27			
				supplier	wire	Aluminium (Al)	7429-90-5		0.376	mg	118351	162			
				supplier	wire	Aluminium (Al)	7429-90-5		2.801	mg	881649	1207			
Encapsulation	M-011 Other inorganic materials	757.095	mg	supplier	mold compound	Silica vitreous	60676-86-0		622.428	mg	822127	268288			
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		53.258	mg	70345	22956			
				supplier	mold compound	Phenol resin	9003-35-4		30.433	mg	40197	13118			
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		22.825	mg	30148	9838			
				supplier	mold compound	Antimony trioxide	1309-64-4		9.130	mg	12059	3935			
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		15.217	mg	20099	6559			
				supplier	mold compound	Carbon black	1333-86-4		3.804	mg	5024	1640			
Connections coating	Solder	17.500	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		17.500	mg	1000000	7543			