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*	2024-12-19
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.

Signature Not Verified

Digitally signed by
Antonella Lanzafame
Date: 2024.12.19
13:58:54 CET

Product				
Mfr item number	Mfr item name	Version	Manufacturing site	date
STHU65N050DM9AG	XSCH*P9FL5A7	A	Z9VA	2024-12-19
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	2320	mg	Each	ECOPACK® 2
Identity	**Authority**			
Comment	0			

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	
CHP	14.8x11.8	9	gull wing	
Comment				
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	13.266	alloy	5718
Lead	11.794	solder	5084

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
Soft solder				
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, Tungsten,**

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**	**XSCH*P9FL5A7**		2320.0000		6999999.0	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	21.192	mg	supplier	die	Silicon(Si)	7440-21-3		20.111	mg	948990	8669
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.333	mg	15713	144
				supplier	metallisation	Copper(Cu)	7440-50-8		0.011	mg	519	5
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.247	mg	11655	106
				supplier	metallisation	Silver(Ag)	7440-22-4		0.098	mg	4624	42
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.044	mg	2076	19
				supplier	metallisation	Tungsten(W)	7440-33-7		0.089	mg	4200	38
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.067	mg	3162	29
				supplier	passivation	Silicon oxide	7631-86-9		0.192	mg	9060	83
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
				supplier	alloy	Nickel (Ni)	7440-02-0		13.019	mg	8500	5612
Soft solder	Solder	12.350	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	11.794	mg	954980	5084
				supplier	solder	Tin(Sn)	7440-31-5		0.247	mg	20000	106
				supplier	solder	Silver(Ag)	7440-22-4		0.309	mg	25020	133
Bonding wires	M-003 Aluminum and its alloys	3.448	mg	supplier	wire	Aluminium (Al)	7429-90-5		3.448	mg	1000000	1486
Bonding wires 2	M-003 Aluminum and its alloys	0.376	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.376	mg	1000000	162
Encapsulation	M-011 Other inorganic materials	733.435	mg	supplier	mold compound	Silica vitreous	60676-86-0		631.072	mg	860433	272014
				supplier	mold compound	Epoxy type resin	25068-38-6		42.408	mg	57821	18279
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		36.558	mg	49845	15758
				supplier	mold compound	phenolic resin	29690-82-2		21.935	mg	29907	9455
				supplier	mold compound	Carbon black	1333-86-4		1.462	mg	1993	630
Connections coating	Solder	17.500	mg	supplier	solder alloy	Tin(Sn)	7440-31-5		17.500	mg	1000000	7543