



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*	2026-05-25
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: 2026.05.25
12:22:32 CEST

Product				
Mfr item number	Mfr item name	Version	Manufacturing site	date
TN5015H-BG-TR	7AD1*PNN5015	A	SH1A	2026-05-25
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	1380	mg	Each	ECOPACK® 2
Identity	Authority			
Comment	0			

Manufacturing information			
J-STD-020 MSL rating	Classification temperature	Number of reflow cycles	
1	245	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	
SIP	10x9.1	3	gull wing	
Comment				
Comment	D1 D2PAK CLIP			

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)	
7c-1	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound	
.		

QueryList : California Prop65 list, dated 3rd January 2025				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	0.266	Die,Leadframe	193	
Lead	8.851	Die,Soft solder,Connections coating	6414	
Lead-Borate Glass	2.589	Die	1876	
Lead Zirconate Titanate	0.000	Die	0	
Antimony trioxide	0.000		0	
Bisphenol A	0.000		0	

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,Soft solder					
Homogeneous Material(s) containing Lead					

QueryList : REACH-4th February 2026					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 (Pb)	1000 ppm	7.29	Soft solder	5283	
.					
.					
.					
.					
.					
.					
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 dinitrate	1000 ppm	7.29	Soft solder	920222	
.			.		
.			.		
.			.		
.			.		
.			.		
.			.		



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	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

Other Fluorinated Substances	Response
QUERY	Response
The product is containing fluorinated substance.	False
Substance Name, CAS	

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	7AD1*PNN5015		1380.0000		5000000 g	1000001 g
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	16.264	mg	supplier	die	Silicon(Si)	7440-21-3		13.252	mg	814806	9603
				supplier	metallisation	Gold(Au)	7440-57-5		0.050	mg	3074	36
				California 65	metallisation	Nickel(Ni)	7440-02-0		0.266	mg	16355	193
				supplier	passivation	Silicon oxide	7631-86-9		0.107	mg	6579	78
				JIG-R & California 65	glass	Lead-BorateGlc	65997-18-4	7c-I-Electrical and electronic cov	2.589	mg	159186	1876
Leadframe	M-004 Copper and its alloys	900.741	mg	supplier	alloy	Copper(Cu)	7440-50-8		899.840	mg	999000	652058
				supplier	alloy	Copper phosph	12517-41-8		0.901	mg	1000	653
Soft solder	Solder	7.922	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting tempera	7.290	mg	920222	5283
				supplier	solder	Silver(Ag)	7440-22-4		0.197	mg	24867	143
				supplier	solder	Tin(Sn)	7440-31-5		0.395	mg	49861	286
				supplier	solder	Flux residue	proprietary		0.040	mg	5049	29
Encapsulation	M-011 Other inorganic materials	417.134	mg	supplier	mold compound	Silica vitreous	60676-86-0		309.513	mg	741999	224285
				supplier	mold compound	Phenol resin	9003-35-4		20.857	mg	50001	15114
				supplier	mold compound	Epoxy Cresol N	29690-82-2		45.885	mg	110001	33250
				supplier	mold compound	other	proprietary		37.542	mg	90000	27204
				California 65	mold compound	Carbon black	1333-86-4		3.337	mg	8000	2418
Connections coating	Solder	6.314	mg	supplier	solder alloy	Tin(Sn)	7440-31-5		6.314	mg	1000000	4575
Trigger		31.625	mg	supplier	alloy	Copper(Cu)	7440-50-8		31.616	mg	999715	22910
				supplier	alloy	Oxygen(O)	7782-44-7		0.009	mg	285	7