



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*	2025-03-26
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
STPSC4G065D	HGDK*5D042T7	A	Z3XA SC	2025-03-26
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	1880	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		
Not Applicable	Not Applicable	,		
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	2	Through-hole	
Comment				
Comment	DK DO 220			

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 : 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	9.482	alloy	5044	
Lead	0.676	solder	360	

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	

QueryList : REACH-21st January 2025					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 dinitrate	1000 ppm	0.67614	Soft solder	955000	



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 :						Mfr Item Name	HGDK*5D042T7			1879.9996		6000002.0	1000002.0
note : Substance present with less 0.001mg will not be declared in this document													
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 or Dies or Wafer (choose)	M-011 Other inorganic materials	0.988	mg	supplier	die	Silicon(Si)	7440-21-3		0.000	mg	0	0	
	M-011 Other inorganic materials			California 65	die	Silicium carbide	409-21-2		0.932	mg	943320	496	
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.019	mg	19231	10	
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.011	mg	11134	6	
				supplier	metallisation	Silver(Ag)	7440-22-4		0.012	mg	12146	6	
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.003	mg	3036	2	
				supplier	Passivation	Silicon nitride(S	12033-89-5		0.004	mg	4049	2	
Leadframe	M-004 Copper and its alloys	947.100	mg	supplier	passivation	Silicon oxide	7631-86-9		0.007	mg	7085	4	
				supplier	alloy	Copper(Cu)	7440-50-8		936.398	mg	988700	498084	
				supplier	alloy	Iron(Fe)	7439-89-6		0.947	mg	1000	504	
				supplier	alloy	Phosphorus(P)	7723-14-0		0.284	mg	300	151	
				supplier	alloy	Nickel(Ni)	7440-02-0		9.471	mg	10000	5038	
Soft solder	Solder	0.708	mg	supplier	solder	tin	7440-31-5		0.014	mg	20000	8	
				supplier	solder	silver	7440-22-4		0.018	mg	25000	9	
				SVHC	solder	lead	7439-92-1	7a-Lead in high melting temper	0.676	mg	955000	360	
Bonding wires	M-004 Copper and its alloys	0.827	mg	supplier	wire	Aluminum(Al)	7440-50-8		0.827	mg	1000000	440	
Encapsulation	M-011 Other inorganic materials	927.686	mg	supplier	mold compound	Silica(Amorpho	60676-86-0		776.787	mg	837339	413185	
				supplier	mold compound	Epoxy resin	29690-82-2		71.856	mg	77458	38222	
				supplier	mold compound	Phenol Resin	9003-35-4		38.323	mg	41311	20385	
				supplier	mold compound	Metal Hydroxid	proprietary		38.323	mg	41311	20385	
				supplier	mold compound	Carbon black	1333-86-4		2.395	mg	2582	1274	
Connections coating	Solder	2.691	mg	supplier	solder alloy	Tin(Sn)	7440-31-5		2.691	mg	1000000	1431	