



## 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*	2024-09-26
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	Material Declaration champion
Representative phone*	Refer to Supplier Comment section	Representative email*	Refer to Supplier Comment section
Supplier comment	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**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
STIB1560DM2-Z	IZZ4*FR676D2	A	SH1A	2024-09-26
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	9160	mg	Each	ECOPACK® 3
<b>Identity</b>	<b>Authority</b>			
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	
DIP	38 x 24	26	Pin	
Comment				
Comment	A0Z4 SDIP2B			

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		TRUE
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)		false
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions		false
Exemption Id.	Description	

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	

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	0.037	alloy	4

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					false
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	
O	O	O	O	O	O

QueryList : REACH-27th June 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 :	<b>Gold, Tin, Tungsten,</b>

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	true
<b>All the adhesive impacted complies with GB 33372</b>	<b>true</b>

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	False

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	IZZ4*FR676D2		9160.0000		9000003.0	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)
Dies	M-011 Other inorganic materials	11.396	mg	supplier	die	Silicon(Si)	7440-21-3		11.001	mg	965339	1201
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.061	mg	5353	7
				supplier	metallisation	Chromium(Cr)	7440-47-3		0.006	mg	527	1
				supplier	metallisation	Gold(Au)	7440-57-5		0.017	mg	1492	2
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.037	mg	3247	4
				supplier	metallisation	Tungsten(W)	7440-33-7		0.066	mg	5792	7
				supplier	metallisation	Vanadium(V)	7440-62-2		0.001	mg	88	0
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.018	mg	1580	2
				supplier	passivation	Silicon oxide	7631-86-9		0.170	mg	14918	19
				supplier	polymer coating	polyimide	proprietary		0.019	mg	1667	2
Leadframe	M-004 Copper and its alloys	2853.339	mg	supplier	alloy	Copper (Cu)	7440-50-8		2777.587	mg	973451	303230
				supplier	alloy	Iron (Fe)	7439-89-6		65.328	mg	22895	7132
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		3.933	mg	1378	429
				supplier	alloy	Zinc (Zn)	7440-66-6		3.420	mg	1199	373
				supplier	alloy	Silver (Ag)	7440-22-4		3.071	mg	1076	335
				supplier	glue	Silver(Ag)	7440-22-4	0	0.014	mg	736842	2
Die attach	M-011 Other inorganic materials	0.019	mg	supplier	glue	Oxiranylmethoxy-phenyl-methylene-bisoxirane	13561-08-5		0.002	mg	105263	0
				supplier	glue	Phenol resin	9003-35-4		0.001	mg	52632	0
				supplier	glue	Epoxypropoxy butane polymer	2425-79-8		0.001	mg	52632	0
				supplier	glue	Diglycidyl phenyl allyl ether	EC417-470-1		0.001	mg	52632	0
				supplier	solder	Tin(Sn)	7440-31-5	0	3.102	mg	955049	339
Soft solder	Solder	3.248	mg	supplier	solder	Silver(Ag)	7440-22-4		0.113	mg	34791	12
				supplier	solder	flux residue	proprietary		0.033	mg	10160	4
				supplier	wire	Aluminium (Al)	7429-90-5		0.788	mg	1000000	86
Bonding wires	M-003 Aluminum and its alloys	0.788	mg	supplier	wire	Copper(Cu)	7440-50-8		0.588	mg	1000000	64
Bonding wires 2	M-004 Copper and its alloys	0.588	mg	supplier	wire							
Encapsulation	M-011 Other inorganic materials	3535.386	mg	supplier	mold compound	Silica vitreous	60676-86-0		2899.017	mg	820000	316487
				supplier	mold compound	Phenol resin Novolac	26834-02-6		141.415	mg	40000	15438
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		282.831	mg	80000	30877
				supplier	mold compound	Phenol resin	9003-35-4		35.354	mg	10000	3860
				supplier	mold compound	Other	proprietary		166.163	mg	47000	18140
				supplier	mold compound	Carbon black	1333-86-4		10.606	mg	3000	1158
Connections coating	Solder	55.236	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		55.236	mg	1000000	6030
Ceramic		2700.000	mg	supplier	ceramic	Alumina	1344-28-1		855.090	mg	316700	93350
				supplier	metallization	Copper(Cu)	7440-50-8		1844.910	mg	683300	201409