



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*	2024-11-21
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

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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
IPS8160HQ-1	2COH*VNI1B46	A	CA2A	2024-11-21
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	150	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	
3	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
qfn	8x6	48	gull wing
Comment			
Comment	B0F3 VFQFPN 48L 8.0 X 6.0 X .90		

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	0.101	alloy	673

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

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 :	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	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	2C0H*VN1B46		150.0000		6000002.0	1000003.0
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	15.415	mg	supplier	die	Silicon(Si)	7440-21-3		14.806	mg	960493	98707
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.091	mg	5903	607
				supplier	metallisation	Gold(Au)	7440-57-5		0.022	mg	1427	147
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.101	mg	6552	673
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.007	mg	454	47
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.105	mg	6812	700
				supplier	passivation	Silicon oxide	7631-86-9		0.102	mg	6617	680
Leadframe	M-004 Copper and its alloys	58.846	mg	supplier	polymer coating	polyimide	proprietary		0.181	mg	11742	1207
				supplier	alloy	Copper(Cu)	7440-50-8		55.740	mg	947218	371600
				supplier	alloy	Iron (Fe)	7439-89-6		0.981	mg	16671	6540
				supplier	alloy	Iron phosphide	26508-33-8		0.228	mg	3875	1520
				supplier	alloy	Zinc(Zn)	7440-66-6		0.073	mg	1241	487
Die attach	M-011 Other inorganic materials	2.430	mg	supplier	metallization	Silver(Ag)	7440-22-4		1.824	mg	30996	12160
				supplier	glue	Silver(Ag)	7440-22-4		2.139	mg	880247	14260
				supplier	glue	Bisphenol F type epoxy resin	9003-36-5		0.097	mg	39918	647
				supplier	glue	Epoxide bisphenol A resin	25068-38-6		0.097	mg	39918	647
Bonding wires	M-004 Copper and its alloys	0.850	mg	supplier	wire	Copper(Cu)	7440-50-8		0.850	mg	1000000	5667
				supplier	mold compound	Silica vitreous	60676-86-0		62.345	mg	879995	415633
Encapsulation	M-011 Other inorganic materials	70.847	mg	supplier	mold compound	Biphenyl epoxy resin	85954-11-6		3.542	mg	49995	23613
				supplier	mold compound	Phenolic resin	205830-20-2		2.763	mg	39000	18420
				supplier	mold compound	Epox type resin	proprietary		1.417	mg	20001	9447
				supplier	mold compound	Carbon black	1333-86-4		0.142	mg	2004	947
				supplier	mold compound	other	proprietary		0.638	mg	9005	4253
Connections coating	Solder	1.612	mg	supplier	solder alloy	Tin(Sn)	7440-31-5		1.612	mg	1000000	10747