



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*	2025-03-27
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*	Floriana SAN BIAGIO	Representative title	APMS Material 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
	AY59*UBM0AC5	B	996H-Z6HA	2025-03-27
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	28	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	
1	260	3	
Bulk solder termination	Terminal plating	Terminal base alloy	Comment
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy	DM01009273

Package designator	Package size	Number of instances	Shape
QFN	3x3	8	gull wing
Comment			
Comment	59 VFDFPN 8 3x3x1.0 PITCH 0.65 SAWN; MDF is valid for ST4E1240IQT		

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 : 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	0.054	alloy	1929

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
0	0	0	0	0

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				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, 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	true
All the adhesive impacted complies with GB 33372	true

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	AY59*UBM0AC5		28.0010		5000138.0	1000035.0
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 or Dies or Wafer (choose)	M-011 Other inorganic materials	1.314	mg	supplier	die	Silicon(Si)	7440-21-3		1.100	mg	837139	39286
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.005	mg	3805	179
				supplier	metallisation	Copper(Cu)	7440-50-8		0.128	mg	97412	4571
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.016	mg	12177	571
				supplier	metallisation	Palladium(Pd)	7440-05-3		0.005	mg	3805	179
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.001	mg	761	36
				supplier	metallisation	Tungsten(W)	7440-33-7		0.007	mg	5327	250
				supplier	passivation	Silicon oxide	7631-86-9		0.028	mg	21309	1000
				supplier	polymer coating	polyimide	proprietary		0.024	mg	18265	857
Leadframe	M-004 Copper and its alloys	7.220	mg	supplier	alloy	Copper(Cu)	7440-50-8		7.003	mg	969945	250107
				supplier	alloy	Zinc(Zn)	7440-66-6		0.009	mg	1247	321
				supplier	alloy	Iron(Fe)	7439-89-6		0.165	mg	22853	5893
				supplier	alloy	Phosphorus(P)	7723-14-0		0.002	mg	277	71
				supplier	metallization	Nickel(Ni)	7440-02-0		0.038	mg	5263	1357
				supplier	metallization	Palladium(Pd)	7440-05-3		0.004	mg	554	143
Die attach	M-015 Other organic materials	0.261	mg	supplier	glue	Silver(Ag)	7440-22-4		0.209	mg	800766	7464
				supplier	glue	Methylene diacrylate p	42594-17-2		0.043	mg	164751	1536
				supplier	glue	Dicyclopentenyloxyeth	68586-19-6		0.007	mg	26820	250
				supplier	glue	Epoxycyclohexylethyltr	3388-04-3		0.001	mg	3831	36
				SVHC	glue	Bis(α,α-dimethylbenzyl	80-43-3		0.001	mg	3831	36
Bonding wires	M-008 Precious metals	0.120	mg	supplier	wire	Gold(Au)	7440-57-5		0.120	mg	1000000	4285
Encapsulation	M-015 Other organic materials	19.085	mg	supplier	mold compound	Silica vitreous	60676-86-0		17.673	mg	926015	631179
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.763	mg	39979	27250
				supplier	mold compound	Phenol resin	85954-11-6		0.573	mg	30024	20464
				supplier	mold compound	Carbon black	1333-86-4		0.076	mg	3982	2714