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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*	2024-02-27
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*	giovanni giacopello	Representative title	ADGMaterial 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.

Signature Not
Verified

Digitally signed by
giovanni giacopello
Date: 2024.02.27
14:43:37 +01:00

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Product				
Mfr item number	Mfr item name	Version	Manufacturing site	date
VN5HV16AHTR-E	LS95*VH36ABC	A	3068	2024-02-27
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	380.00	mg	Each	ECOPACK® 1
Identity	**Authority**			
Comment	ECOPACK® or ECOPACK® 1 is STMicroelectronics trade name for ROHS compliant devices			

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	DM01019540	
Package designator	Package size	Number of instances	Shape	
SIP	6.50x6.10x2.30	6	Gull wing	
Comment	TO-252 6 LEADS SMD (HPAK)			

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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 : ELV directive : 2000/53/EC amended 2020/363_March 2020	**Response**
1 - Product(s) meets EU ELV requirements without any exemptions	false
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	**true**

Exemption Id.	**Description**
8(e)	8(e) - Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)

QueryList : California Prop65 list, dated 25th Feb 2022	**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	0.249	die - leadframe	655
Lead	5.818	soft solder	15311
Antimony trioxide	1.348	encapsulation	3547

QueryList : REACH-14th June 2023	**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	1000 ppm	5.818	Soft solder	15311

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	1000 ppm	5.818	Soft solder	955023

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	true

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

Stockholm Convention Persistent Organic Pollutants	**Response**
Product is compliant with Stockholm Convention Persistent Organic Pollutants Annex I	true

QueryList : EUSRR Directive	**Response**
Product contains hazardous materials listed in EUSRR Annex II	True
The material present in the product is:	Lead
PFAS/PTFE Restriction	**Response**
Product contains Per- and Polyfluorinated Substance	False
BPA Restriction	**Response**
Product contains Bisphenol A (Isopropylidenediphenol)	False

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						**Mfr Item Name**	**LS95*VH36ABC**					
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	11.355	mg	supplier	die	Silicon(Si)	7440-21-3		10.546	mg	928753	27752
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.065	mg	5724	171
				supplier	metallisation	Copper(Cu)	7440-50-8		0.087	mg	7662	229
				supplier	metallisation	Gold(Au)	7440-57-5		0.011	mg	969	29
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.053	mg	4668	139
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.279	mg	24571	734
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.050	mg	4403	132
				supplier	passivation	Silicon oxide	7631-86-9		0.135	mg	11889	355
				supplier	polymer coating	polyimide	proprietary		0.129	mg	11361	339
Leadframe	M-004 Copper and its alloys	243.718	mg	supplier	alloy	Copper(Cu)	7440-50-8		242.672	mg	995708	638611
				supplier	alloy	Iron phosphide	26508-33-8		0.204	mg	837	537
				supplier	alloy	Iron(Fe)	7439-89-6		0.112	mg	460	295
				supplier	metallization	Nickel (Ni)	7440-02-0		0.196	mg	804	516
				supplier	metallization	Silver (Ag)	7440-22-4		0.494	mg	2027	1300
				supplier	metallization	Phosphorus (P)	7723-14-0		0.040	mg	164	105
Soft solder	Solder	6.092	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temperat	5.818	mg	955023	15311
				supplier	solder	Silver(Ag)	7440-22-4		0.152	mg	24951	400
				supplier	solder	Tin(Sn)	7440-31-5		0.122	mg	20026	321
Bonding wires	M-003 Aluminum and its alloys	4.873	mg	supplier	wire	Aluminium (Al)	7429-90-5		4.873	mg	1000000	12824
Bonding wires 2	M-008 Precious metals	0.081	mg	supplier	wire	Gold(Au)	7440-57-5		0.081	mg	1000000	213
Encapsulation	M-011 Other inorganic materials	112.368	mg	supplier	mold compound	Silica vitreous	60676-86-0		92.479	mg	823002	243366
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		7.866	mg	70002	20700
				supplier	mold compound	Phenol resin	9003-35-4		4.495	mg	40002	11829
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		3.371	mg	30000	8871
				supplier	mold compound	Antimony trioxide	1309-64-4		1.348	mg	11996	3547
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		2.247	mg	19997	5913
				supplier	mold compound	Carbon black	1333-86-4		0.562	mg	5001	1479
Connections coating	Solder	1.513	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.513	mg	1000000	3982

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