Materials Declaration Form

IPC	**1752**	**Version**	**2**
Form Type *	Distribute		
Sectionals *	Material Info Manufacturing Info	**Subsectionals ***	A-D **** : Required Field***

Supplier Information			
Company Name *	STMicroelectronics	**Response Date ***	2022-02-11
Company Unique ID	NL 008751171B01		
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**	ADG 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

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Legal Statement

Supplier Acceptance *	true	**Legal Declaration ***	Standard

Legal Statement	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: 2022.02.11 10:51:09 +01:00

Product				
Mfr Item Number	**Mfr Item Name**	**Version**	**Mfr Site**	**Date**
L9969S-TR	STV5*UR6SCBQ	A	959	2022-02-11
	Amount	**UoM**	**Unit type**	**ST ECOPACK Grade**
	470	mg	Each	ECOPACK® 2
Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant (in each organic material)			

Manufacturing information				
J-STD-020 MSL Rating	**Classification Temp**	**Nbr of Reflow Cycles**		
3	260	3		
Bulk Solder Termination	**Terminal Plating**	**Terminal Base Alloy**	**Comment**	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00838842	

Package Designator	**Package Size**	**Nbr of instances**	**Shape**	
QFP	10.30,7.50,2.28	24	gull wing	
Comment	PowerSSO24			

QueryList : RoHS Directive 2011/65/EU- 8 June 2011 – Annex II amended by Delegated Directive 2015/863 - 31 March 2015

Query	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

Query	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**
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 17th Dec 2021

Query			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	0.055	die	117
Lead	2.319	soft solder	4934

QueryList : Chinese RoHS , references : SJT 11364 – 2014 and GBT 26572 – 2014

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
Hasardous substance				
Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	Hexavalent Chromium (Cr VI)	PBB & PBDE
X	O	O	O	O
Soft solder				
Homogeneous Material(s) containing Lead				

QueryList : REACH-17 Jan 2022

Query				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	2.32	Soft solder	4934
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	2.32	Soft solder	974779

QueryList : Responsible metals sourcing

Query	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 :	**Cobalt, Gold, Tin, Tungsten,**
This product is in the scope of the responsible metals sourcing, its compliance is covered by our company processes .	

QueryList : Korea Chemical Control Act_ 27 Dec 2017 update

Query	Response
The Product does contain at least one of the substances listed in Chemical Control Act	**false**

China GB 33372-2020 Limit standard for volatile organic compounds content in adhesives - 4 March 2020 application date 1st December 2020

Query	Response
The product contains adhesives identified under GB 33372	**false**

Stockholm Convention Persistent Organic Pollutants

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

Material Composition Declaration :
note : Substance present with less 0.001mg will not be declared in this document

Mfr Item Name STV5*UR6SCBQ

Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	M-011 Other inorganic materials	5.765	mg	supplier	die	Silicon(Si)	7440-21-3		5.197	mg	901476	11057
				supplier	metallisation	Chromium(Cr)	7440-47-3		0.003	mg	520	6
				supplier	metallisation	Copper(Cu)	7440-50-8		0.354	mg	61405	753
				supplier	metallisation	Cobalt(Co)	7440-48-4		0.001	mg	173	2
				supplier	metallisation	Gold(Au)	7440-57-5		0.008	mg	1388	17
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.055	mg	9540	117
				supplier	metallisation	Palladium(Pd)	7440-05-3		0.013	mg	2255	28
				supplier	metallisation	Tungsten(W)	7440-33-7		0.016	mg	2775	34
				supplier	metallisation	Vanadium(V)	7440-62-2		0.001	mg	173	2
				supplier	passivation	Silicon oxide	7631-86-9		0.057	mg	9887	121
				supplier	polymer coating	polyimide	proprietary		0.060	mg	10408	128
Leadframe	M-004 Copper and its alloys	162.687	mg	supplier	alloy	Copper(Cu)	7440-50-8		158.350	mg	973341	336915
				supplier	alloy	Iron(Fe)	7439-89-6		3.724	mg	22891	7923
				supplier	alloy	Iron phosphide	1310-43-6		0.224	mg	1377	477
				supplier	alloy	Zinc(Zn)	7440-66-6		0.195	mg	1199	415
				supplier	metallization	Silver (Ag)	7440-22-4		0.194	mg	1192	413
Soft solder	Solder	2.379	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	2.319	mg	974780	4934
				supplier	solder	Silver(Ag)	7440-22-4		0.036	mg	15132	77
				supplier	solder	Tin(Sn)	7440-31-5		0.024	mg	10088	51
Bonding wires	M-004 Copper and its alloys	0.953	mg	supplier	wire	Copper(Cu)	7440-50-8		0.953	mg	1000000	2028
Encapsulation	M-011 Other inorganic materials	294.359	mg	supplier	mold compound	Silica vitreous	60676-86-0		260.508	mg	885001	554272
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		15.601	mg	53000	33194
				supplier	mold compound	Phenol resin	205830-20-2		11.774	mg	39999	25051
				supplier	mold compound	Epoxy type resin	proprietary		5.887	mg	19999	12526
				supplier	mold compound	Carbon black	1333-86-4		0.589	mg	2001	1253
Connections coating	Solder	3.857	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		3.857	mg	1000000	8206