



Materials Declaration Form

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

** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2021-01-12
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 *	marianna grasso	Representative Title	ADG MD 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
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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.

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
SCTWA90N65G2V-4	TSTM*SQFJBYF	A	998G	2021-01-12
	Amount	UoM	Unit type	ST ECOPACK Grade
	6080.00	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		 life.augmented
Not Applicable	Not Applicable	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00680985	

Package Designator	Size	Nbr of instances	Shape	
SIP	15.80,21.00,5.00	4	Through-hole	
Comment	TO247-4			

QueryList : RoHS Directive 2011/65/EU-July 2011 Annex II amended by Delegated Directive 2015/863-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	FALSE
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	TRUE
Exemption Id.	Description
8e	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)

QueryList : California Prop65 list, dated 3rd January 2020			
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	24.00	die - leadframe	3948
Lead	6.73	soft solder	1106

QueryList : REACH-25th June 2020				
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	6.73	Soft solder	1106
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	6.726	Soft solder	954991

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

Material Composition Declaration :						Mfr Item Name	TSTM*SQJBYF					
note : Substance present with less 0.001mg will not be declared in this document												
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	11.955	mg	supplier	die	Silicium carbide	409-21-2		11.438	mg	956755	1883
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.257	mg	21497	42
				supplier	metallisation	Gold(Au)	7440-57-5		0.019	mg	1589	3
				supplier	metallisation	Nicel(Ni)	7440-02-0		0.088	mg	7361	14
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.006	mg	502	1
				supplier	passivation	Silicon oxide	7631-86-9		0.091	mg	7612	15
				supplier	polymer coating	Polyimide	Proprietary		0.056	mg	4684	9
Leadframe	M-004 Copper and its alloys	4782.465	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8		4752.335	mg	993700	781634
				supplier	alloy & coating	Nicel(Ni)	7440-02-0		23.913	mg	5000	3933
				supplier	alloy & coating	Iron(Fe)	7439-89-6		4.782	mg	1000	787
				supplier	alloy & coating	Phosphorus metal	7723-14-0		1.435	mg	300	236
Soft solder	Solder	7.043	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	6.726	mg	954991	1106
				supplier	solder	Silver(Ag)	7440-22-4		0.176	mg	24989	29
				supplier	solder	Tin(Sn)	7440-31-5		0.141	mg	20020	23
Bonding wires	M-003 Aluminum and its alloys	3.374	mg	supplier	wire	Aluminium (Al)	7429-90-5		3.374	mg	1000000	555
Bonding wires 2	M-003 Aluminum and its alloys	0.603	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.603	mg	1000000	99
Adhesion Promoter	M-015 Other organic materials	0.089	mg	supplier	polimer	Aminopropyl triethoxysilane	919-30-2		0.089	mg	1000000	15
Encapsulation	M-011 Other inorganic materials	1235.820	mg	supplier	mold compound	Silica vitreous	60676-86-0		967.647	mg	783000	159152
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		185.373	mg	150000	30489
				supplier	mold compound	Phenol resin	9003-35-4		61.791	mg	50000	10163
				supplier	mold compound	Triphenylphosphine	603-35-0		9.887	mg	8000	1626
				supplier	mold compound	Bismuth compound	7440-69-9		4.943	mg	4000	813
connections coating	Solder	38.651	mg	supplier	solder alloy	Carbon black	1333-86-4		6.179	mg	5000	1016
				supplier		Tin (Sn)	7440-31-5		38.651	mg	1000000	6357