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 ***	2021-04-21
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 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
marianna grasso
Date: 2021.04.21
09:15:27 +02:00

Product				
Mfr Item Number	**Mfr Item Name**	**Version**	**Mfr Site**	**Date**
STW72N60DM6AG	TSLW*PQ6BA62	A	3068	2021-04-21
	Amount	**UoM**	**Unit type**	**ST ECOPACK Grade**
	4430	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**		
Not Applicable	Not Applicable	,		
Bulk Solder Termination	**Terminal Plating**	**Terminal Base Alloy**	**Comment**	
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy	DM00533584	

Package Designator	**Package Size**	**Nbr of instances**	**Shape**	
SIP	15.75,20.15,5.15	3	Through hole	
Comment	TO 247			

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	false
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	true

Exemption Id.	Description
8e	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 18th December 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	3.22	die - leadframe	727
Lead	21.15	soft solder	4774

QueryList : REACH-19th January 2021

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	21.15	Soft solder	4774

Query	Response
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	21.15	Soft solder	954979

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

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						**Mfr Item Name**	**TSLW*PQ6BA62**					
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	33.068	mg	supplier	die	Silicon(Si)	7440-21-3		29.591	mg	894853	6680
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.772	mg	23346	174
				supplier	metallisation	Copper(Cu)	7440-50-8		0.285	mg	8619	64
				supplier	metallisation	Nickel(Ni)	7440-02-0		1.979	mg	59846	447
				supplier	metallisation	Silver(Ag)	7440-22-4		0.200	mg	6048	45
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.049	mg	1482	11
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.178	mg	5383	40
				supplier	passivation	Silicon oxide	7631-86-9		0.014	mg	423	3
Leadframe	M-004 Copper and its alloys	2709.936	mg	supplier	alloy	Copper(Cu)	7440-50-8		2705.048	mg	998196	610620
				supplier	alloy	Iron(Fe)	7439-89-6		2.709	mg	1000	612
				supplier	alloy	Iron phosphide	26508-33-8		0.813	mg	300	184
				supplier	metallization	Nickel (Ni)	7440-02-0		1.242	mg	458	280
				supplier	metallization	Phosphorus (P)	7723-14-0		0.124	mg	46	28
Soft solder	Solder	22.145	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	21.148	mg	954979	4774
				supplier	solder	Silver(Ag)	7440-22-4		0.554	mg	25017	125
				supplier	solder	Tin(Sn)	7440-31-5		0.443	mg	20004	100
Bonding wires	M-003 Aluminum and its alloys	2.894	mg	supplier	wire	Aluminium (Al)	7429-90-5		2.894	mg	1000000	653
Bonding wires 2	M-003 Aluminum and its alloys	0.130	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.129	mg	992308	29
				supplier	wire	Magnesium (Mg)	7439-95-4		0.001	mg	7692	0
Encapsulation	M-011 Other inorganic materials	1655.632	mg	supplier	mold compound	Silica vitreous	60676-86-0		1152.319	mg	695999	260117
				supplier	mold compound	Quartz	14808-60-7		165.563	mg	100000	37373
				supplier	mold compound	Phenol resin	9003-35-4		99.338	mg	60000	22424
				supplier	mold compound	Epoxy resin	proprietary		215.232	mg	130001	48585
				supplier	mold compound	Carbon black	1333-86-4		8.278	mg	5000	1869
				supplier	mold compound	Polyethylene resin	9002-88-4		6.623	mg	4000	1495
				supplier	mold compound	Mercaptopropyl trimethoxysilane	4420-74-0		6.623	mg	4000	1495
				supplier	mold compound	Triphenylphosphine	603-35-0		1.656	mg	1000	374
Connections coating	Solder	6.197	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.197	mg	1000000	1399