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 ***	2019-02-28
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 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		

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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 omprehensive 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: 2019.02.28
10:09:52 +01:00

Product

Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STN6N60M2	CS2K*MQ6SB8F	A	998G	2019-02-28
	Amount	**UoM**	**Unit type**	**ST ECOPACK Grade**
	110	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	250	3	
Bulk Solder Termination	**Terminal Plating**	**Terminal Base Alloy**	**Comment**
Not Applicable	Tin (Sn), matte	Copper Alloy	

Package Designator	Size	Nbr of instances	Shape	
DSO	6.5 - 3.4 - 1.8	2	gull wing	
Comment	Package: SOT223-2			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by 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 2017/2096 _November 2017

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 26th October 2018

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	2.42	Die - Leadframe	21991
Lead	1.20	Soft solder	10945

QueryList : REACH-15th January 2019

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	1.20	Soft solder	10945

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	1.20	Soft solder	954798

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						**Mfr Item Name**	**CS2K*MQ6SB8F**					
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	2.074	mg	supplier	die	Silicon (Si)	7440-21-3		1.960	mg	945034	17818
				supplier	metallization	Aluminium (Al)	7429-90-5		0.055	mg	26519	500
				supplier	Passivation	Silicon Nitride	12033-89-5		0.013	mg	6268	118
				supplier	Passivation	Silicon Oxide	7631-86-9		0.019	mg	9161	173
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	482	9
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.019	mg	9161	173
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.007	mg	3375	64
Leadframe	M-004 Copper and its alloys	60.017	mg	supplier	alloy	Copper (Cu)	7440-50-8		57.539	mg	958711	523081
				supplier	alloy	Iron (Fe)	7439-89-6		0.060	mg	1000	545
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.018	mg	300	164
				supplier	metallization	Nickel (Ni)	7440-02-0		2.400	mg	39989	21818
Soft solder	Solder	1.261	mg	SVHC	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	1.204	mg	954798	10945
				supplier	solder	Silver (Ag)	7440-22-4		0.032	mg	25376	291
				supplier	solder	Tin (Sn)	7440-31-5		0.025	mg	19826	227
Bonding wires	M-004 Copper and its alloys	0.361	mg	supplier	wire	Copper (Cu)	7440-50-8		0.361	mg	1000000	3282
Encapsulation	M-011 Other inorganic materials	43.456	mg	supplier	mold compound	Silica, vitreous	60676-86-0		37.110	mg	853967	337364
				supplier	mold compound	Epoxy Novolac resin	29690-82-2		1.304	mg	30007	11855
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		2.825	mg	65008	25682
				supplier	mold compound	Phenol Resin	26834-02-6		1.738	mg	39995	15800
				supplier	mold compound	Bismuth compound	7440-69-9		0.261	mg	6006	2373
				supplier	mold compound	Carbon black	1333-86-4		0.218	mg	5017	1982
connections coating	Solder	2.831	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.831	mg	1000000	25736