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 ***	2021-01-07
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

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 marianna grasso
Date: 2021.01.07 10:58:52 +01:00

Product				
Mfr Item Number	**Mfr Item Name**	**Version**	**Mfr Site**	**Date**
STD13N60M6	VMDP*BQ6FB62	A	3068	2021-01-07
	Amount	**UoM**	**Unit type**	**ST ECOPACK Grade**
	330	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
1	260	3		
Bulk Solder Termination	**Terminal Plating**	**Terminal Base Alloy**	**Comment**	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00617121	

Package Designator	**Size**	**Nbr of instances**	**Shape**	
SIP	6.50,6.10,2.30	3	gull wing	
Comment	TO 252 DPAK			

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	0.40	die - leadrame	1215
Lead	3.11	soft solder	9436

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	3.11	Soft solder	9436
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	3.114	Soft solder	954922

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**	**VMDP*BQ6FB62**					
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	4.626	mg	supplier	die	Silicon(Si)	7440-21-3		4.139	mg	894725	12544
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.108	mg	23346	327
				supplier	metallisation	Copper(Cu)	7440-50-8		0.040	mg	8648	121
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.277	mg	59879	839
				supplier	metallisation	Silver(Ag)	7440-22-4		0.028	mg	6053	85
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.007	mg	1513	21
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.025	mg	5404	76
				supplier	passivation	Silicon oxide	7631-86-9		0.002	mg	432	6
Leadframe	M-004 Copper and its alloys	165.100	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8		164.749	mg	997874	499239
				supplier	alloy & coating	Nickel(Ni)	7440-02-0		0.124	mg	751	376
				supplier	alloy & coating	Iron(Fe)	7439-89-6		0.076	mg	460	230
				supplier	alloy & coating	Iron Phosphide(FeP)	26508-33-8		0.139	mg	842	421
				supplier	alloy & coating	Phosphorus metal	7723-14-0		0.012	mg	73	36
Soft solder	Solder	3.261	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	3.114	mg	954922	9436
				supplier	solder	Silver(Ag)	7440-22-4		0.082	mg	25145	248
				supplier	solder	Tin(Sn)	7440-31-5		0.065	mg	19933	197
Bonding wires	M-003 Aluminum and its alloys	0.401	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.401	mg	1000000	1215
Bonding wires 2	M-003 Aluminum and its alloys	0.032	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.032	mg	1000000	97
Encapsulation	M-011 Other inorganic materials	155.535	mg	supplier	mold compound	Silica vitreous	60676-86-0		136.093	mg	874999	412403
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		6.221	mg	39997	18852
				supplier	mold compound	Epoxy type resin	proprietary		4.666	mg	30000	14139
				supplier	mold compound	Phenol type resin	proprietary		7.777	mg	50002	23567
				supplier	mold compound	Carbon black	1333-86-4		0.778	mg	5002	2358
connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3167