



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 *	2019-01-18
Company Unique ID	NL 008751171801		
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 *	Rossana Bonaccorso	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 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
STD3N65M6	NCDP*BQFYB62	A	3068	2019-01-18
	Amount	UoM	Unit type	ST ECOPACK Grade
	330.00	mg	Each	ECOPACK2
	Comment	ECOPACK2 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	
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	6.5-6.1-2.3	3	GULL WING	
Comment	TO 252 DPAK			

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	1.21	Die - Leadframe	3667
Lead	2.06	Soft solder	6242

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	2.06	Soft solder	6242
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	2.06	Soft solder	955030

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	NCDP*BQFYB62									
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	1.719	mg	supplier	die	Silicon (Si)	7440-21-3		1.538	mg	894645	4658				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.040	mg	23283	121				
				supplier	metallization	Copper (Cu)	7440-50-8		0.015	mg	8731	45				
				supplier	metallization	Nickel (Ni)	7440-02-0		0.088	mg	51222	267				
				supplier	metallization	Silver (Ag)	7440-22-4		0.005	mg	2911	15				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	1164	6				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.009	mg	5239	27				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.001	mg	582	3				
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	582	3				
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.015	mg	8731	45				
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.005	mg	2910	15				
				Leadframe	M-004 Copper and its alloys	166.052	mg	supplier	alloy	Copper (Cu)	7440-50-8		164.730	mg	992039	499182
								supplier	alloy	iron (Fe)	7439-89-6		0.165	mg	994	500
supplier	alloy	Iron Phosphide (FeP)	26508-33-8						0.050	mg	300	152				
supplier	metallization	Nickel (Ni)	7440-02-0						1.107	mg	6667	3355				
supplier	metallization	Lead (Pb)	7439-92-1					7a-Lead in high me	2.060	mg	955030	6242				
Soft solder	Solder	2.157	mg	SVHC	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	2.060	mg	955030	6242				
				supplier	solder	Silver (Ag)	7440-22-4		0.054	mg	25035	167				
				supplier	solder	Tin (Sn)	7440-31-5		0.043	mg	19935	130				
Bonding wires	M-011 Other inorganic materials	0.147	mg	supplier	wire	Copper (Cu)	7440-50-8		0.147	mg	1000000	445				
Encapsulation	M-011 Other inorganic materials	158.880	mg	supplier	mold compound	Silica, vitreous	60676-86-0		139.021	mg	875006	421276				
				supplier	mold compound	Tetramethyl-biphenyl-diyl-bis oxymethylene-b	85954-11-6		6.355	mg	39999	19258				
				supplier	mold compound	Epoxy Resin	25068-38-6		4.766	mg	29997	14442				
				supplier	mold compound	phenol resin	29690-82-2		7.944	mg	50000	24073				
				supplier	mold compound	Carbon black	1333-86-4		0.794	mg	4998	2406				
				supplier	mold compound	Carbon black	1333-86-4		0.794	mg	4998	2406				
Connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3167				