



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D <i>* : Required Field</i>

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2019-03-22
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		

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
STD3LN80K5	CLDP*VK80B52	A	3068	2019-03-22
Amount	UoM	Unit type	ST ECOPACK Grade	
330.00	mg	Each	ECOPACK2	
	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	
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 23rd November 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	1.12	Die - Leadframe	3406
Lead	2.36	Soft solder	7142

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	2.36	Soft solder	7142
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	2.36	Soft solder	955024

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	CLDP**VK80852						
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	1.870	mg	supplier	die	Silicon (Si)	7440-21-3		1.780	mg	951872	5394	
				supplier	metallization	Aluminium (Al)	7429-90-5		0.035	mg	18717	106	
				supplier	Passivation	Silicon Nitride	12033-89-5		0.012	mg	6416	36	
				supplier	Passivation	Silicon Oxide	7631-86-9		0.019	mg	10160	58	
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	535	3	
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.017	mg	9091	52	
Leadframe	M-004 Copper and its alloys	166.052	mg	supplier	back side metallization	Silver (Ag)	7440-22-4		0.006	mg	3209	18	
				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	151	
Soft solder	Solder	2.468	mg	supplier	metallization	Nickel (Ni)	7440-02-0		1.107	mg	6667	3355	
				supplier	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	2.357	mg	955024	7142
				supplier	solder	Silver (Ag)	7440-22-4		0.062	mg	25122	188	
				supplier	solder	Tin (Sn)	7440-31-5		0.049	mg	19854	148	
Bonding wires	M-011 Other inorganic materials	0.098	mg	supplier	wire	Copper (Cu)	7440-50-8		0.098	mg	1000000	297	
Encapsulation	M-011 Other inorganic materials	158.467	mg	supplier	mold compound	Silica, vitreous	60676-86-0		138.659	mg	875002	420179	
				supplier	mold compound	Tetramethyl-biphenyl-diy- bis oxymethylene-bi	85954-11-6		6.339	mg	40002	19209	
				supplier	mold compound	Epoxy Resin	25068-38-6		4.754	mg	30000	14406	
				supplier	mold compound	phenol resin	29690-82-2		7.923	mg	49998	24009	
				supplier	mold compound	Carbon black	1333-86-4		0.792	mg	4998	2400	
Connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3167	