



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 *	2019-03-18
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 Giacobello	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
STD3NK80ZT4	TQDP*EZ826WV	A	994X	2019-03-18
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	0.04	Die	115
Lead	5.10	Soft solder	15464

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	5.103	Soft solder	15464
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	5.103	Soft solder	954903

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	TQDP*E2826WV					
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	5.800	mg	supplier	die	Silicon (Si)	7440-21-3		5.598	mg	965172	16964
				supplier	metallization	Aluminium (Al)	7429-90-5		0.079	mg	13621	239
				supplier	Passivation	Silicon Nitride	12033-89-5		0.026	mg	4483	79
				supplier	Passivation	Silicon Oxide	7631-86-9		0.042	mg	7241	127
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	517	9
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.038	mg	6552	115
Leadframe	M-004 Copper and its alloys	164.944	mg	supplier	back side metallization	Silver (Ag)	7440-22-4		0.014	mg	2414	42
				supplier	alloy	Copper (Cu)	7440-50-8		164.152	mg	995198	497430
				supplier	alloy	CopperPhosphorous (CuP)	12517-41-8		0.330	mg	2001	1000
				supplier	alloy	Cobalt (Co)	7440-48-4		0.462	mg	2801	1400
Soft solder	Solder	5.344	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	5.103	mg	954903	15464
				supplier	solder	Silver (Ag)	7440-22-4		0.134	mg	25075	407
				supplier	solder	Tin (Sn)	7440-31-5		0.107	mg	20022	324
				supplier	wire	Aluminium (Al)	7429-90-5		0.185	mg	1000000	561
Encapsulation	M-011 Other inorganic materials	152.682	mg	supplier	mold compound	Fused Silica	60676-86-0		130.544	mg	855006	395588
				supplier	mold compound	Phenol resin Novolak	26834-02-6		7.634	mg	49999	23133
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		7.634	mg	49999	23133
				supplier	mold compound	Poly Phenyl Glycidyl Ether co-Dicyclopentadien	119345-05-0		5.344	mg	35002	16194
				supplier	mold compound	Benzaldehyde hydroxy polymer	106466-55-1		0.763	mg	4997	2312
				supplier	mold compound	Carbon black	1333-86-4		0.763	mg	4997	2312
connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3167