



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 *	2016-12-19
Contact Name *	Refer to Supplier Comment section		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
STD6N52K3	TQDP*TZ52B6V	A	994X	2016-12-19
Amount	UoM	Unit type	ST ECOPACK Grade	
370.00	mg	Each	ECOPACK2	

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	
NAC	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-April 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)

Query : California Prop65 list, dated 5th August 2016			
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	108
Lead	5.37	Soft solder	14519

QueryList : REACH-20th June 2016				
Query				Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				true
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	TQDP*TZ5286V					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	6.125	mg	supplier	die	Silicon (Si)	7440-21-3		5.910	mg	964898	15973
				supplier	metallization	Aluminium (Al)	7429-90-5		0.078	mg	12735	211
				supplier	Passivation	Silicon Nitride	12033-89-5		0.025	mg	4082	68
				supplier	Passivation	Silicon Oxide	7631-86-9		0.060	mg	9796	162
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	490	8
				supplier	back side metallization	Gold (Au)	7440-57-5		0.009	mg	1469	24
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.040	mg	6530	108
				supplier	alloy	Copper (Cu)	7440-50-8		164.152	mg	995198	443654
Leadframe	Copper & its alloys	164.944	mg	supplier	alloy	CopperPhosphorous (CuP)	12517-41-8		0.330	mg	2001	892
				supplier	alloy	Cobalt (Co)	7440-48-4		0.462	mg	2801	1249
				supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	5.372	mg	954852	14519
Soft solder	Solder	5.626	mg	supplier	solder	Silver (Ag)	7440-22-4		0.141	mg	25063	381
				supplier	solder	Tin (Sn)	7440-31-5		0.113	mg	20085	305
				supplier	wire	Aluminium (Al)	7429-90-5		0.185	mg	1000000	500
Bonding wires	Other inorganic materials	0.185	mg	supplier	mold compound	Fused Silica	60676-86-0		164.224	mg	854999	443849
				supplier	mold compound	Phenol resin Novolak	26834-02-6		9.604	mg	50001	25957
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		9.604	mg	50001	25957
				supplier	mold compound	Poly Phenyl Glycidyl Ether co-Dicyclopentadien	119345-05-0		6.723	mg	35003	18170
				supplier	mold compound	Benzaldehyde hydroxy polymer	106466-55-1		0.960	mg	4998	2595
Encapsulation	Other Organic Materials	192.075	mg	supplier	mold compound	Carbon black	1333-86-4		0.960	mg	4998	2595
				supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	2824
Connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	2824