



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 *	2017-03-02
Contact Name *	Refer to Supplier Comment section		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
STW8N90K5	TSLW*VK9HB52	A	3068	2017-03-02
Amount	UoM	Unit type	ST ECOPACK Grade	
4430.00	mg	Each	ECOPACK2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
NA	NA	NA		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NA	Tin (Sn), matte	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
SIP	15.75-20.15-5.15	3	Through-hole	
Comment	TO 247			

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 27th January 2017			
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	0.97	die backside metal - leadframe metal	218
Lead	7.77	soft solder	1753

QueryList : REACH-12th January 2017				
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	TSLW*VK9H852					
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	8.995	mg	supplier	die	Silicon (Si)	7440-21-3		8.568	mg	952529	1934
				supplier	metallization	Aluminium (Al)	7429-90-5		0.160	mg	17788	36
				supplier	metallization	Copper (Cu)	7440-50-8		0.059	mg	6559	13
				supplier	Passivation	Silicon Nitride	12033-89-5		0.037	mg	4112	8
				supplier	Passivation	Silicon Oxide	7631-86-9		0.091	mg	10117	21
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.004	mg	445	1
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.051	mg	5670	12
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.004	mg	445	1
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.021	mg	2335	5
				Leadframe	Copper & its alloys	2826.183	mg	supplier	alloy	Copper (Cu)	7440-50-8	
supplier	alloy	CopperPhosphorous (CuP)	12517-41-8						2.825	mg	1000	638
supplier	metallization	Nickel (Ni)	7440-02-0						0.915	mg	324	207
supplier	metallization	Phosphorus (P)	12185-10-3						0.074	mg	26	17
supplier	metallization	Lead (Pb)	7439-92-1					7a-Lead in high mel	7.767	mg	954998	1753
Soft solder	Solder	8.133	mg	JIG - R	solder	Silver (Ag)	7440-22-4		0.203	mg	24960	46
				supplier	solder	Tin (Sn)	7440-31-5		0.163	mg	20042	37
				supplier	wire	Aluminium (Al)	7429-90-5		0.770	mg	996119	171
Bonding wires	Other inorganic materials	0.773	mg	supplier	wire	Magnesium (Mg)	7439-95-4		0.003	mg	3881	1
				supplier	wire							
Encapsulation	Other Organic Materials	1576.620	mg	supplier	mold compound	Silica, vitreous	60676-86-0		1371.659	mg	870000	309630
				supplier	mold compound	Epoxy resin	25068-38-6		157.662	mg	100000	35590
				supplier	mold compound	Phenol resin	29690-82-2		39.416	mg	25000	8898
				supplier	mold compound	Carbon Black	1333-86-4		7.883	mg	5000	1779
Connections coating	Solder	9.296	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		9.296	mg	1000000	2098