



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 *	2016-10-21
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	<p>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.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STW65N80K5	TSLW*VK89B52	A	SHENZHEN B/E	2016-10-21
	Amount	UoM	Unit type	ST ECOPACK Grade
	4430	mg	Each	ECOPACK2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
NAC	NAC	NAC		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	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
5 - Product(s) is obsolete, no information is available	false
6 - Product(s) is unknown, no information is available	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 : 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						Mfr Item Name	TSLW*VK89B52					
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	48.368	mg	supplier	die	Silicon (Si)	7440-21-3		46.364	mg	958569	10466
				supplier	metallization	Aluminium (Al)	7429-90-5		0.863	mg	17842	195
				supplier	Passivation	Silicon Nitride	12033-89-5		0.199	mg	4113	45
				supplier	Passivation	Silicon Oxide	7631-86-9		0.492	mg	10172	111
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.022	mg	455	5
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.316	mg	6533	71
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.112	mg	2316	25
				supplier	alloy	Copper (Cu)	7440-50-8		2821.522	mg	994461	636912
Leadframe	Copper & its alloys	2837.237	mg	supplier	alloy	Iron (Fe)	7439-89-6		1.300	mg	459	293
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		2.373	mg	836	536
				supplier	metallization	Nickel (Ni)	7440-02-0		11.968	mg	4218	2702
				supplier	metallization	Phosphorus (P)	12185-10-3		0.074	mg	26	17
				supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	39.758	mg	954987	8975
Soft solder	Solder	41.632	mg	JIG - R	solder	Silver (Ag)	7440-22-4		1.041	mg	25004	235
				supplier	solder	Tin (Sn)	7440-31-5		0.833	mg	20009	188
				supplier	wire	Aluminium (Al)	7429-90-5		1.160	mg	997249	262
Bonding wires	Other inorganic materials	1.163	mg	supplier	wire	Magnesium (Mg)	7439-95-4		0.003	mg	2751	1
				supplier	wire							
Encapsulation	Other Organic Materials	1492.304	mg	supplier	mold compound	Silica, vitreous	60676-86-0		1298.304	mg	870000	293071
				supplier	mold compound	Epoxy resin	25068-38-6		149.230	mg	100000	33686
				supplier	mold compound	Phenol resin	29690-82-2		37.308	mg	25000	8422
				supplier	mold compound	Carbon Black	1333-86-4		7.462	mg	5000	1684
Connections coating	Solder	9.296	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		9.296	mg	1000000	2098