



## Materials Declaration Form

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

<b>Supplier Information</b>			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2017-09-06
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Giuseppe Vitali Palma	<b>Representative Title</b>	ADG MD Champion
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**Uncertainty Statement**


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<b>Legal Statement</b>			
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	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
STPS20M100SG-TR	7SD2*Z80M01V	A	3068	2017-09-06
Amount	UoM	Unit type	ST ECOPACK Grade	
1380.00	mg	Each	ECOPACK1	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
1	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	10.2-9.15-4.5	2	gull wing	
Comment	D2PAK			

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	0.13	Die back side metal - Leadframe metal	91
Lead	6.51	Soft solder	4720
Antimony trioxide	6.95	Encapsulation	5036

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	75D2*Z80M01V					
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	7.544	mg	supplier	die	Silicon (Si)	7440-21-3		7.126	mg	944592	5164
				supplier	metallization	Aluminium (Al)	7429-90-5		0.295	mg	39103	214
				supplier	metallization	Titanium (Ti)	7440-32-6		0.007	mg	928	5
				supplier	metallization	Tungsten (W)	7440-33-7		0.011	mg	1458	8
				supplier	Passivation	Silicon Oxide	7631-86-9		0.043	mg	5700	31
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	398	2
				supplier	back side metallization	Gold (Au)	7440-57-5		0.010	mg	1326	7
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.049	mg	6495	36
				supplier	alloy	Copper (Cu)	7440-50-8		777.537	mg	998594	563433
				supplier	alloy	Iron (Fe)	7439-89-6		0.358	mg	459	259
Leadframe	Copper & its alloys	778.632	mg	supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.654	mg	840	474
				supplier	metallization	Nickel (Ni)	7440-02-0		0.077	mg	99	56
				supplier	metallization	Phosphorus (P)	12185-10-3		0.006	mg	8	4
				supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high met	6.513	mg	954985	4720
				supplier	solder	Silver (Ag)	7440-22-4		0.170	mg	25074	123
Soft solder	Solder	6.819	mg	supplier	solder	Tin (Sn)	7440-31-5		0.136	mg	19941	99
				supplier	wire	Aluminium (Al)	7429-90-5		5.144	mg	1000000	3728
				supplier	solder	Silver (Ag)	7440-22-4		0.170	mg	25074	123
Bonding wire	Other inorganic materials	5.144	mg	supplier	wire	Aluminium (Al)	7429-90-5		5.144	mg	1000000	3728
				supplier	mold compound	Silica, vitreous	60676-86-0		466.973	mg	805999	338386
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		40.556	mg	70000	29388
				supplier	mold compound	Phenol resin	9003-35-4		23.175	mg	40000	16793
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		34.762	mg	59999	25190
				supplier	mold compound	Antimony Trioxide	1309-64-4		6.953	mg	12001	5038
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		4.056	mg	7001	2939
				supplier	mold compound	Carbon black	1333-86-4		2.897	mg	5000	2099
Connections coating	Solder	2.489	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.489	mg	1000000	1804