



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 *	2018-05-07
Company Unique ID	NL 008751171801		
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
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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
STPS1150A	HNSR*Z69P81R	A	9941	2018-05-07
Amount	UoM	Unit type	ST ECOPACK Grade	
68	mg	Each	ECOPACK® 2	
	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	
Not Applicable	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SMC	4.3-2.77-2	2	J bend	
Comment	Package: SMA			

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)		

QueryList : California Prop65 list, dated 15th December 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	0.01	Die	118
Lead	2.58	Soft solder	37926

QueryList : REACH-15th January 2018				
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	HNSR*Z69P81R					
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	0.728	mg	supplier	die	Silicon (Si)	7440-21-3		0.706	mg	969780	10382
				supplier	metallization	Aluminium (Al)	7429-90-5		0.004	mg	5493	58
				supplier	metallization	Gold (Au)	7440-57-5		0.003	mg	4121	44
				supplier	passivation	Nickel (Ni)	7440-02-0		0.003	mg	4121	44
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1374	15
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1374	15
				supplier	Passivation	Silicon Oxide	7631-86-9		0.004	mg	5495	59
				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	1374	15
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.005	mg	6868	74
				supplier	alloy	Copper (Cu)	7440-50-8		26.282	mg	999506	386500
Leadframe & Clip	M-004 Copper and its alloys	26.295	mg	supplier	alloy	Zinc (Zn)	7440-66-6		0.001	mg	38	15
				supplier	alloy	Iron (Fe)	7439-89-6		0.003	mg	114	44
				supplier	alloy	Iron Phosphide (Fe2P)	1310-43-6		0.009	mg	342	132
				supplier	alloy	Lead (Pb)	7439-92-1	7a-Lead in high me	2.579	mg	924704	37926
Soft solder	Solder	2.789	mg	JIG - R	solder	Tin (Sn)	7440-31-5		0.140	mg	50197	2059
				supplier	solder	Silver (Ag)	7440-22-4		0.070	mg	25099	1029
				supplier	solder	Amorphous silica	7631-86-9		25.796	mg	686776	379353
Encapsulation	M-011 Other inorganic materials	37.561	mg	supplier	mold compound	Quartz	14808-60-7		9.398	mg	250206	138206
				supplier	mold compound	Phenol resin	9003-35-4		2.254	mg	60009	33147
				supplier	mold compound	carbon black	1333-86-4		0.113	mg	3009	1662
				supplier	solder alloy	Tin (Sn)	7440-31-5		0.627	mg	1000000	9221
connections coating	Solder	0.627	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.627	mg	1000000	9221