



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 *	2019-01-18
Company Unique ID	NL 008751171B01		
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 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
STPS10H100SFY	VA7R*Z08PDSV	A	Z6IA	2019-01-18
	Amount	UoM	Unit type	ST ECOPACK Grade
	90.8	mg	Each	ECOPACK2
	Comment	ECOPACK2 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	
QFF	6.5 - 4.6 - 1.1	3	flat	
Comment	Package: PSMC-3L-EP			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-March 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 : ELV directive : 2000/53/EC amended 2017/2096 _November 2017	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	FALSE
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	TRUE
Exemption Id.	Description
8e	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)

QueryList : California Prop65 list, dated 26th October 2018			
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	396
Lead	0.07	Soft solder	760

QueryList : REACH-15th January 2019				
Query				Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Lead	1000 ppm	0.07	Soft solder	760
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Embedded article nor Homogeneous Material above the limits per the definition within REACH				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material
Lead	1000 ppm	0.07	Soft solder	841463

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	VA7R*Z08PDSV					
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	2.419	mg	supplier	die	Silicon (Si)	7440-21-3		2.255	mg	932396	24835
				supplier	metallization	Aluminium (Al)	7429-90-5		0.020	mg	8270	220
				supplier	metallization	Gold (Au)	7440-57-5		0.014	mg	5789	154
				supplier	passivation	Nickel (Ni)	7440-02-0		0.014	mg	5789	154
				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	1240	33
				supplier	metallization	Tungsten (W)	7440-33-7		0.005	mg	2067	55
				supplier	Passivation	Silicon Oxide	7631-86-9		0.019	mg	7856	209
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	827	22
				supplier	back side metallization	Gold (Au)	7440-57-5		0.005	mg	2067	55
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.022	mg	9097	242
Lead frame	Copper & its alloys	37.147	mg	supplier	polymer die coating	Durimide	Proprietary		0.060	mg	24602	655
				supplier	alloy	Copper (Cu)	7440-50-8		36.051	mg	970496	397037
				supplier	alloy	Phosphorus (P)	7723-14-0		0.056	mg	1506	617
				supplier	alloy	Iron (Fe)	7439-89-6		0.966	mg	26005	10646
				supplier	alloy	Zinc(Zn)	7440-66-6		0.074	mg	1993	815
Soft solder	Solder	0.082	mg	supplier	solder	Tin (Sn)	7440-31-5		0.004	mg	48780	44
				supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	0.069	mg	841463	760
				supplier	solder	Silver (Ag)	7440-22-4		0.002	mg	24390	22
				supplier	solder	Polyglycol ether	9038-95-3		0.007	mg	85367	77
Clips	Copper & its alloys	8.922	mg	supplier	clips	Copper (Cu)	7440-50-8		8.659	mg	970522	95363
				supplier	clips	Phosphorus (P)	7723-14-0		0.013	mg	1458	143
				supplier	clips	Iron (Fe)	7439-89-6		0.232	mg	26003	2555
				supplier	clips	Zinc(Zn)	7440-66-6		0.018	mg	2017	198
Encapsulation	Other Organic Materials	40.582	mg	supplier	mold compound	Amorphous Silica	60676-86-0		32.465	mg	799985	357544
				supplier	mold compound	Solid Epoxy Resin 1	223769-10-6		2.232	mg	55000	24581
				supplier	mold compound	Solid Epoxy Resin 2	85954-11-6		3.450	mg	85013	37996
				supplier	mold compound	Phenol Resin	205830-20-2		1.420	mg	34991	15639
				supplier	mold compound	Carbon Black	60676-86-0		0.203	mg	5002	2236
Connection coating	Other inorganic materials	1.648	mg	supplier	mold compound	Crystalline Silica	14808-60-7		0.812	mg	20009	8943
				supplier	solder alloy	Tin (Sn)	7440-31-5		1.648	mg	1000000	18150