



## 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>			

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2017-11-20
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Rossana Bonaccorso	<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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Legal Statement			
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	Standard
<b>Legal Statement</b>	<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 omprehensive 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
STPSC20065W	HSLV*4L021T7	A	3068	2017-11-20
	Amount	UoM	Unit type	ST ECOPACK Grade
	4400.00	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	2	Through-hole	
Comment	DO 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	0.94	Die / Leadframe	215
Lead	3.86	Soft solder	877

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	HSLV*4L021T7					
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	3.934	mg	supplier	die	Silicium carbide	409-21-2		3.757	mg	955008	854
				supplier	metallization	Aluminium (Al)	7429-90-5		0.042	mg	10676	10
				supplier	metallization	Gold (Au)	7440-57-5		0.006	mg	1526	1
				supplier	metallization	Silver (Ag)	7440-22-4		0.072	mg	18302	16
				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	508	0
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	508	0
				supplier	back side metallization	Gold (Au)	7440-57-5		0.006	mg	1525	1
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.029	mg	7372	7
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.018	mg	4575	4
				supplier	alloy	Copper (Cu)	7440-50-8		2696.060	mg	998334	612741
Leadframe	Copper & its alloys	2700.559	mg	supplier	alloy	Iron (Fe)	7439-89-6		1.242	mg	460	282
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		2.268	mg	840	515
				supplier	metallization	Nickel (Ni)	7440-02-0		0.915	mg	339	208
				supplier	metallization	Phosphorus (P)	12185-10-3		0.074	mg	27	17
				supplier	alloy	Lead (Pb)	7439-92-1	7a-Lead in high mel	3.859	mg	954962	877
Soft solder	Solder	4.041	mg	JIG - R	solder	Silver (Ag)	7440-22-4		0.101	mg	24994	23
				supplier	solder	Tin (Sn)	7440-31-5		0.081	mg	20044	20
				supplier	wire	Aluminium (Al)	7429-90-5		1.847	mg	1000000	420
Bonding wires	Other inorganic materials	1.847	mg	supplier	wire	Aluminium (Al)	7429-90-5		1.847	mg	1000000	420
				supplier	mold compound	Silica, vitreous	60676-86-0		1464.577	mg	870000	332858
				supplier	mold compound	Epoxy resin	25068-38-6		168.342	mg	100000	38260
				supplier	mold compound	Phenol resin	29690-82-2		42.086	mg	25000	9565
Encapsulation	Other Organic Materials	1683.422	mg	supplier	mold compound	Carbon Black	1333-86-4		8.417	mg	5000	1913
				supplier	solder alloy	Tin (Sn)	7440-31-5		6.197	mg	1000000	1408
Connections coating	Solder	6.197	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.197	mg	1000000	1408