



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 *	2017-06-19
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	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

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
STPSC10065DY	BSDK*4L05AT5	A	3068	2017-06-19
	Amount	UoM	Unit type	ST ECOPACK Grade
	1870.00	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	10.2-16.25-4.5	2	Through-hole	
Comment	DO 220			

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	0.11	die backside metal-leadframe metal	57
Lead	2.13	soft solder	1139

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	BSDK*4L05AT5					
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	2.092	mg	supplier	die	Silicium carbide	409-21-2		1.999	mg	955545	1069
				supplier	metallization	Aluminium (Al)	7429-90-5		0.022	mg	10516	12
				supplier	metallization	Gold (Au)	7440-57-5		0.003	mg	1435	2
				supplier	metallization	Silver (Ag)	7440-22-4		0.038	mg	18164	20
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	478	1
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	478	1
				supplier	back side metallization	Gold (Au)	7440-57-5		0.003	mg	1434	2
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.015	mg	7170	8
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.010	mg	4780	5
				supplier	alloy	Copper (Cu)	7440-50-8		1182.772	mg	998617	632498
Leadframe	Copper & its alloys	1184.410	mg	supplier	alloy	Iron (Fe)	7439-89-6		1.184	mg	1000	633
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.355	mg	300	190
				supplier	metallization	Nickel (Ni)	7440-02-0		0.092	mg	77	48
				supplier	metallization	Phosphorus (P)	12185-10-3		0.007	mg	6	4
				supplier	metallization	Lead (Pb)	7439-92-1	7a-Lead in high met	2.129	mg	954709	1139
Soft solder	Solder	2.230	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high met	2.129	mg	954709	1139
				supplier	solder	Silver (Ag)	7440-22-4		0.056	mg	25112	30
				supplier	solder	Tin (Sn)	7440-31-5		0.045	mg	20179	24
Bonding wires	Other inorganic materials	1.385	mg	supplier	wire	Aluminium (Al)	7429-90-5		1.385	mg	1000000	741
				supplier	wire	Aluminium (Al)	7429-90-5		1.385	mg	1000000	741
Encapsulation	Other Organic Materials	675.642	mg	supplier	mold compound	Silica, vitreous	60676-86-0		587.809	mg	870000	314336
				supplier	mold compound	Epoxy resin	25068-38-6		67.564	mg	100000	36130
				supplier	mold compound	Phenol resin	29690-82-2		16.891	mg	25000	9033
				supplier	mold compound	Carbon Black	1333-86-4		3.378	mg	5000	1806
				supplier	solder alloy	Tin (Sn)	7440-31-5		4.241	mg	1000000	2268
Connections coating	Solder	4.241	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		4.241	mg	1000000	2268