



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 *	2017-05-22
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
STPS3045CGY-TR	ASD2*F54SA2Y	A	3068	2017-05-22
	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		
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	0.15	die backside metal - leadframe metal	106
Lead	9.08	soft solder	6580
Antimony Trioxide	6.64	mold compound	4809

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	ASD2*F54SA2Y					
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	10.691	mg	supplier	die	Silicon (Si)	7440-21-3		10.098	mg	944538	7318
				supplier	metallization	Aluminium (Al)	7429-90-5		0.418	mg	39095	303
				supplier	metallization	Titanium (Ti)	7440-32-6		0.009	mg	841	7
				supplier	metallization	Tungsten (W)	7440-33-7		0.015	mg	1403	11
				supplier	Passivation	Silicon Oxide	7631-86-9		0.062	mg	5799	45
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.005	mg	468	4
				supplier	back side metallization	Gold (Au)	7440-57-5		0.015	mg	1403	11
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.069	mg	6453	50
Leadframe	Copper & its alloys	778.631	mg	supplier	alloy	Copper (Cu)	7440-50-8		777.536	mg	998594	563432
				supplier	alloy	Iron (Fe)	7439-89-6		0.358	mg	460	259
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.654	mg	840	474
				supplier	metallization	Nickel (Ni)	7440-02-0		0.077	mg	98	56
				supplier	metallization	Phosphorus (P)	12185-10-3		0.006	mg	8	4
				supplier	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high met	9.081	mg	954990
Soft solder	Solder	9.509	mg	supplier	solder	Silver (Ag)	7440-22-4		0.238	mg	25029	172
				supplier	solder	Tin (Sn)	7440-31-5		0.190	mg	19981	138
				supplier	wire	Aluminium (Al)	7429-90-5		25.720	mg	1000000	18638
Bonding wires	Other inorganic materials	25.720	mg	supplier	wire	Aluminium (Al)	7429-90-5		25.720	mg	1000000	18638
				supplier	mold compound	Silica, vitreous	60676-86-0		445.685	mg	805999	322960
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		38.707	mg	70000	28046
				supplier	mold compound	Phenol resin	9003-35-4		22.118	mg	39999	16028
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		33.178	mg	60001	24042
				supplier	mold compound	Antimony Trioxide	1309-64-4		6.636	mg	12001	4809
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		3.871	mg	7000	2805
Encapsulation	Other Organic Materials	552.960	mg	supplier	mold compound	Carbon black	1333-86-4		2.765	mg	5000	2004
				supplier	mold compound	Carbon black	1333-86-4		2.765	mg	5000	2004
Connections coating	Solder	2.489	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.489	mg	1000000	1804