



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 *	2017-11-30
Contact Name *	Refer to Supplier Comment section		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
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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 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.

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STPSC4H065DI	HZUR*3D921T6	A	SH1A	2017-11-30
Amount	UoM	Unit type	ST ECOPACK Grade	
2170.00	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
Not Applicable	Not Applicable	Not Applicable		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	10,15.5,4.5	2	Through-hole	
Comment				

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 21st October 2016			
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	0.02	Die	8
Lead	4.25	Soft solder	1957

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	HZUR*3D92116					
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	2.814	mg	supplier	die	Silicium carbide	409-21-2		2.048	mg	971537	944
				supplier	metallization	Aluminium (Al)	7429-90-5		0.012	mg	5693	6
				supplier	metallization	Gold (Au)	7440-57-5		0.002	mg	949	1
				supplier	passivation	Nickel (Ni)	7440-02-0		0.009	mg	4269	4
				supplier	metallization	Silver (Ag)	7440-22-4		0.020	mg	9488	9
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	474	0
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	474	0
				supplier	back side metallization	Gold (Au)	7440-57-5		0.002	mg	949	1
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.008	mg	3795	4
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.005	mg	2372	2
Leadframe	Copper & its alloys	1560.408	mg	supplier	alloy	Copper (Cu)	7440-50-8		1558.379	mg	998700	718147
				supplier	alloy	Iron (Fe)	7439-89-6		0.718	mg	460	331
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		1.311	mg	840	604
Soft solder	Solder	4.997	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	4.247	mg	849910	1957
				supplier	solder	Antimony (Sb)	7440-36-0		0.500	mg	100060	230
				supplier	solder	Tin (Sn)	7440-31-5		0.250	mg	50030	115
Bonding wires	Other inorganic materials	1.231	mg	supplier	wire	Aluminium (Al)	7429-90-5		1.231	mg	1000000	567
				supplier	wire	Aluminium (Al)	7429-90-5		1.231	mg	1000000	567
Encapsulation	Other Organic Materials	597.047	mg	supplier	mold compound	Silica, vitreous	60676-86-0		453.756	mg	760000	209104
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		60.899	mg	102000	28064
				supplier	mold compound	Phenol resin	9003-35-4		35.823	mg	60000	16508
				supplier	mold compound	Others	Proprietary		29.852	mg	50000	13757
				supplier	mold compound	Metal hydroxide	Proprietary		11.941	mg	20000	5503
Connections coating	Solder	4.209	mg	supplier	mold compound	Carbon black	1333-86-4		4.776	mg	8000	2202
				supplier	solder alloy	Tin (Sn)	7440-31-5		4.209	mg	1000000	1940