



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 *	2017-11-20
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
STPSC20065DI	HZUR*4L021T7	A	SH1A	2017-11-20
	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	0.06	Die	29
Lead	6.36	Soft solder	2929

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*4L02117					
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	3.967	mg	supplier	die	Silicium carbide	409-21-2		3.757	mg	947063	1731
				supplier	metallization	Aluminium (Al)	7429-90-5		0.042	mg	10587	19
				supplier	metallization	Gold (Au)	7440-57-5		0.006	mg	1514	3
				supplier	passivation	Nickel (Ni)	7440-02-0		0.033	mg	8319	15
				supplier	metallization	Silver (Ag)	7440-22-4		0.072	mg	18150	33
				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	504	1
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	504	1
				supplier	back side metallization	Gold (Au)	7440-57-5		0.006	mg	1512	3
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.029	mg	7310	13
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.018	mg	4537	8
				supplier	alloy	Copper (Cu)	7440-50-8		1555.244	mg	998700	716702
Leadframe	Copper & its alloys	1557.268	mg	supplier	alloy	Iron (Fe)	7439-89-6		0.716	mg	460	330
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		1.308	mg	840	603
				supplier	alloy	Lead (Pb)	7439-92-1	7a-Lead in high me	6.355	mg	849940	2929
Soft solder	Solder	7.477	mg	JIG - R	solder	Antimony (Sb)	7440-36-0		0.748	mg	100040	345
				supplier	solder	Tin (Sn)	7440-31-5		0.374	mg	50020	172
				supplier	wire	Aluminium (Al)	7429-90-5		1.231	mg	1000000	567
Encapsulation	Other Organic Materials	595.848	mg	supplier	mold compound	Silica, vitreous	60676-86-0		452.844	mg	759999	208684
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		60.777	mg	102002	28008
				supplier	mold compound	Phenol resin	9003-35-4		35.751	mg	60000	16475
				supplier	mold compound	Others	Proprietary		29.792	mg	49999	13729
				supplier	mold compound	Metal hydroxide	Proprietary		11.917	mg	20000	5492
				supplier	mold compound	Carbon black	1333-86-4		4.767	mg	8000	2197
connections coating	Solder	4.209	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		4.209	mg	1000000	1940