



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 *	2019-05-20
Company Unique ID	NL 008751171B01		
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Contact Email *	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

While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.

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
STPSC2H065B-TR	HZDP*3D041T7	A	3068	2019-05-20
	Amount	UoM	Unit type	ST ECOPACK Grade
	320.00	mg	Each	ECOPACK2
	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
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	6.5-6.1-2.3	3	GULL WING	
Comment	TO 252 DPAK			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-March 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)

QueryList : ELV directive : 2000/53/EC amended 2017/2096 _November 2017	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	FALSE
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	TRUE
Exemption Id.	Description
8e	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)

QueryList : California Prop65 list, dated 23rd November 2018			
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	0.10	Die - Leadframe	313
Lead	0.58	Soft solder	1822

QueryList : REACH-15th January 2019				
Query				Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Lead	1000 ppm	0.58	Soft solder	1822
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Embedded article nor Homogeneous Material above the limits per the definition within REACH				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material
Lead	1000 ppm	0.583	Soft solder	955738

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	HZDP*3D0417					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	M-011 Other inorganic materials	0.507	mg	supplier	die	Silicium carbide	409-21-2		0.481	mg	948718	1503
				supplier	metallization	Aluminium (Al)	7429-90-5		0.005	mg	9862	16
				supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	1972	3
				supplier	metallization	Nickel (Ni)	7440-02-0		0.004	mg	7890	13
				supplier	metallization	Silver (Ag)	7440-22-4		0.009	mg	17751	28
				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	1972	3
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.004	mg	7890	13
				supplier	polymer die coating	PIXL Gamma-butyrolactone	96-48-0		0.002	mg	3945	6
				supplier	alloy	Copper (Cu)	7440-50-8		164.152	mg	994601	512975
				supplier	alloy	CopperPhosphorous (CuP)	12517-41-8		0.330	mg	1999	1031
Leadframe	M-004 Copper and its alloys	165.043	mg	supplier	alloy	Cobalt (Co)	7440-48-4		0.462	mg	2799	1444
				supplier	metallization	Nickel (Ni)	7440-02-0		0.092	mg	557	286
				supplier	metallization	Phosphorus (P)	7723-14-0		0.007	mg	44	22
				supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	0.583	mg	955738	1822
				supplier	solder	Silver (Ag)	7440-22-4		0.015	mg	24590	47
				supplier	solder	Tin (Sn)	7440-31-5		0.012	mg	19672	38
Bonding wires	M-003 Aluminum and its alloys	0.181	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.181	mg	1000000	566
Encapsulation	M-011 Other inorganic materials	152.614	mg	supplier	mold compound	Silica, vitreous	60676-86-0		133.537	mg	874998	417303
				supplier	mold compound	Tetramethyl-biphenyl-diyil-bis oxymethylene-bi	85954-11-6		6.105	mg	40003	19078
				supplier	mold compound	Epoxy Resin	25068-38-6		4.578	mg	29997	14306
				supplier	mold compound	phenol resin	29690-82-2		7.631	mg	50002	23847
				supplier	mold compound	Carbon black	1333-86-4		0.763	mg	5000	2384
connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3266