



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 *	2018-05-02
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


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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
STTH5R06FP	GSUV*W01G101	A	3068	2018-05-02
	Amount	UoM	Unit type	ST ECOPACK Grade
	1900	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
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	10-9.05-4.4	3	Through-hole	
Comment	TO 220 ISOL FULL PACK 0.5 AC-2L			

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)

QueryList : California Prop65 list, dated 15th December 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	0.44	Die - Leadframe	234
Lead	3.44	Soft solder	1813

QueryList : REACH-15th January 2018				
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
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				true
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	GSUV*W01G101				6000000.0	1000000.0
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	5.018	mg	supplier	die	Silicon (Si)	7440-21-3		4.930	mg	982463	2595
				supplier	metallization	Aluminium (Al)	7429-90-5		0.043	mg	8569	23
				supplier	Passivation	Silicon Oxide	7631-86-9		0.014	mg	2790	7
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	399	1
				supplier	back side metallization	Gold (Au)	7440-57-5		0.005	mg	996	3
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.024	mg	4783	13
Leadframe	M-004 Copper and its alloys	647.269	mg	supplier	alloy	Copper (Cu)	7440-50-8		645.974	mg	997999	339986
				supplier	alloy	Iron (Fe)	7439-89-6		0.647	mg	1000	341
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.194	mg	300	102
				supplier	metallization	Nickel (Ni)	7440-02-0		0.420	mg	648	221
				supplier	metallization	Phosphorus (P)	7723-14-0		0.034	mg	53	18
				supplier	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	3.444	mg	955075
Soft solder	Solder	3.606	mg	supplier	solder	Silver (Ag)	7440-22-4		0.090	mg	24958	47
				supplier	solder	Tin (Sn)	7440-31-5		0.072	mg	19967	38
				supplier	wire	Aluminium (Al)	7429-90-5		2.791	mg	1000000	1469
Bonding wires	M-003 Aluminum and its alloys	2.791	mg	supplier	wire	Aluminium (Al)	7429-90-5		2.791	mg	1000000	1469
				supplier	mold compound	Quartz	14808-60-7		864.467	mg	700000	454983
				supplier	mold compound	Silica, vitreous	60676-86-0		92.622	mg	75000	48748
				supplier	mold compound	Epoxy resin	25068-38-6		172.893	mg	140000	90996
				supplier	mold compound	phenol resin	25690-82-2		86.447	mg	70000	45498
				supplier	mold compound	metal hydroxide	Proprietary		12.350	mg	10000	6500
Encapsulation	M-011 Other inorganic materials	1234.954	mg	supplier	mold compound	carbon black	1333-86-4		6.175	mg	5000	3250
				supplier	solder alloy	Tin (Sn)	7440-31-5		6.362	mg	1000000	3348
connections coating	Solder	6.362	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.362	mg	1000000	3348