



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 *	2017-12-06
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 *	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
STTH2R06S	HNZK*F83B81B	A	ZA41	2017-12-06
	Amount	UoM	Unit type	ST ECOPACK Grade
	250	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
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOJ	4.5X2.16X3.68	2	J bend	
Comment	Package: SMC CLIP (SOD 15 NEW)			

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 7th July 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	0.01	Die	52
Lead	3.96	Soft solder	15840

QueryList : REACH-7th July 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	HNZK*F83B81B					
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	1.227	mg	supplier	die	Silicon (Si)	7440-21-3		1.189	mg	969030	4756
				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	5705	28
				supplier	metallization	Gold (Au)	7440-57-5		0.005	mg	4075	20
				supplier	passivation	Nickel (Ni)	7440-02-0		0.005	mg	4075	20
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	815	4
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	1630	8
				supplier	Passivation	Silicon Oxide	7631-86-9		0.007	mg	5705	28
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	815	4
				supplier	back side metallization	Gold (Au)	7440-57-5		0.002	mg	1630	8
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.008	mg	6520	32
Leadframe & clips	M-004 Copper and its alloys	89.918	mg	supplier	alloy	Copper (Cu)	7440-50-8		89.875	mg	999522	359500
				supplier	alloy	Zinc (Zn)	7440-66-6		0.004	mg	44	16
				supplier	alloy	Iron (Fe)	7439-89-6		0.009	mg	100	36
				supplier	alloy	Phosphorus (P)	12185-10-3		0.030	mg	334	120
Soft solder	Solder	4.281	mg	JIG - R	soft solder	Lead (Pb)	7439-92-1	7a-Lead in high me	3.960	mg	925018	15840
				supplier	soft solder	Tin (Sn)	7440-31-5		0.214	mg	49988	856
				supplier	soft solder	Silver (Ag)	7440-22-4		0.107	mg	24994	428
Encapsulation	M-011 Other inorganic materials	152.433	mg	supplier	Moulding Compound	Amorphous Silica	7631-86-9		93.595	mg	614007	374380
				supplier	Moulding Compound	Quartz	14808-60-7		30.486	mg	199996	121944
				supplier	Moulding Compound	epoxy resin	25068-38-6		18.291	mg	119994	73164
				supplier	Moulding Compound	phenolic resin	29690-82-2		9.146	mg	60000	36584
supplier	Moulding Compound	Carbon black	1333-86-4		0.915	mg	6003	3660				
Connections coating	Solder	2.141	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.141	mg	1000000	8564