



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 *	2017-05-31
Contact Name *	Refer to Supplier Comment section		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
STTH3R04S	HNZK*E65L81E	A	ZA41	2017-05-31
Amount		UoM	Unit type	ST ECOPACK Grade
250.00		mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
SOJ	6.88X2.15X5.97	1	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
5 - Product(s) is obsolete, no information is available	false
6 - Product(s) is unknown, no information is available	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 27th January 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	0.02	die metal - backside metal	84
Lead	3.95	soft solder	15796

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						Mfr Item Name	HNZK*E65L81E					
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	1.946	mg	supplier	die	Silicon (Si)	7440-21-3		1.616	mg	830421	6464
				supplier	metallization	Aluminium (Al)	7429-90-5		0.078	mg	40082	312
				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	1028	8
				supplier	metallization	Nickel (Ni)	7440-02-0		0.008	mg	4111	32
				supplier	Passivation	Silicon Oxide	7631-86-9		0.011	mg	5653	44
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	514	4
				supplier	back side metallization	Gold (Au)	7440-57-5		0.003	mg	1542	12
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.013	mg	6680	52
				supplier	polymer die coating	Probimide	proprietary		0.214	mg	109969	856
Leadframe & Clip	Copper and its alloy	89.658	mg	Supplier	alloy	Copper (Cu)	7440-50-8		89.615	mg	999520	358460
				Supplier	alloy	Zinc (Zn)	7440-66-6		0.004	mg	45	16
				Supplier	alloy	Iron (Fe)	7439-89-6		0.009	mg	100	36
				Supplier	alloy	Phosphorus (P)	12185-10-3		0.030	mg	335	120
				Supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	3.949	mg	925041	15796
Die Attach	Solder	4.269	mg	Supplier	solder	Tin (Sn)	7440-31-5		0.213	mg	49895	852
				Supplier	solder	Silver (Ag)	7440-22-4		0.107	mg	25064	428
				Supplier	mold compound	Amorphous Silica	7631-86-9		93.324	mg	614006	373296
Encapsulation	Other organic material	151.992	mg	Supplier	mold compound	Quartz	14808-60-7		30.398	mg	199997	121592
				Supplier	mold compound	epoxy resin	25068-38-6		18.239	mg	120000	72956
				Supplier	mold compound	phenolic resin	29690-82-2		9.119	mg	59997	36476
				Supplier	mold compound	Carbon black	1333-86-4		0.912	mg	6000	3648
				Supplier	connection coating	Tin (Sn)	7440-31-5		2.135	mg	1000000	8540