



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 *	2017-01-27
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
STTH1R04UY	BNZJ*K28L8AE	A	ZA41	2017-01-27
Amount		UoM	Unit type	ST ECOPACK Grade
98.00		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	4.50X2.16X3.68	1	J bend	
Comment	Package: SMB CLIP (SOD 6 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)

QueryList : REACH-20th June 2016				
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	BNZ1*K28L8AE					
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	0.852	mg	supplier	die	Silicon (Si)	7440-21-3		0.805	mg	944836	8214
				supplier	metallization	Aluminium (Al)	7429-90-5		0.006	mg	7042	61
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1174	10
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1174	10
				supplier	metallization	Nickel (Ni)	7440-02-0		0.004	mg	4695	41
				supplier	metallization	Gold (Au)	7440-57-5		0.004	mg	4695	41
				supplier	Passivation	Silicon Oxide	7631-86-9		0.006	mg	7042	61
				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	1174	10
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.006	mg	7042	61
				supplier	polymer die coating	Problimide	proprietary		0.018	mg	21126	184
Leadframe & Clip	Copper and its alloy	40.844	mg	Supplier	Alloy	Copper (Cu)	7440-50-8		40.824	mg	999510	416571
				Supplier	Alloy	Zinc (Zn)	7440-66-6		0.002	mg	49	20
				Supplier	Alloy	Iron (Fe)	7439-89-6		0.004	mg	98	41
				Supplier	Alloy	Iron Phosphide(FeP)	26508-33-8		0.014	mg	343	145
Die attach	Other organic material	2.321	mg	Supplier	soft solder	Silver (Ag)	7440-22-4		0.058	mg	24990	592
				Supplier	soft solder	Tin (Sn)	7440-31-5		0.116	mg	49978	1184
				JIG R	soft solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	2.147	mg	925032	21908
Encapsulation	Other organic material	53.044	mg	Supplier	Molding Compound	silica fused	7631-86-9		39.251	mg	739971	400520
				Supplier	Molding Compound	silica quartz	14808-60-7		10.609	mg	200004	108255
				Supplier	Molding Compound	phenolic resin	9003-35-4		2.653	mg	50015	27071
				Supplier	Molding Compound	carbon black	1333-86-4		0.531	mg	10010	5418
Finishing	Other inorganic material	0.939	mg	Supplier	connection coating	Tin (Sn)	7440-31-5		0.939	mg	1000000	9582