



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 *	2015-10-26
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	Representative Title	IPD 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		

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Legal Statement			
Supplier Acceptance *	true	Legal Declaration *	Standard
Legal Statement	<p>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.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STIEC45-28ACS	8HZH*TWB033M	A	BOUSKOURA B/E	2015-10-26
Amount		UoM	Unit type	ST ECOPACK Grade
250.00		mg	Each	ECOPACK2

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	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOJ	6.69, 5.63, 2.38	2	J BEND	
Comment	SMC CLIP (SOD 15)			

QueryList : ROHS directive 2011/65/EU _ July 2011	
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-15th June 2015				
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	8HZH*TWB033M					
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	9.223	mg	supplier	die	Silicon (Si)	7440-21-3		9.058	mg	982112	36236
				supplier	metallization	Aluminium (Al)	7429-90-5		0.026	mg	2819	104
				supplier	Passivation	Silicon Oxide	7631-86-9		0.034	mg	3686	136
				supplier	back side metallization	Aluminium (Al)	7429-90-5		0.035	mg	3794	140
				supplier	back side metallization	Gold (Au)	7440-57-5		0.012	mg	1301	48
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.058	mg	6288	232
Leadframe	Copper & its alloys	79.541	mg	supplier	alloy	Copper (Cu)	7440-50-8		78.669	mg	989037	314676
				supplier	alloy	Iron (Fe)	7439-89-6		0.079	mg	993	316
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.024	mg	302	96
				supplier	metallization	Nickel (Ni)	7440-02-0		0.769	mg	9668	3076
Soft solder	Solder	7.920	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	7.405	mg	934975	29620
				supplier	solder	Tin (Sn)	7440-31-5		0.396	mg	50000	1584
				supplier	solder	Silver (Ag)	7440-22-4		0.119	mg	15025	476
Encapsulation	Other Organic Materials	111.830	mg	supplier	mold compound	Silica, vitreous	60676-86-0		84.990	mg	759993	339960
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		11.407	mg	102003	45628
				supplier	mold compound	Phenol resin	9003-35-4		6.710	mg	60002	26840
				supplier	mold compound	Others	Proprietary		5.591	mg	49996	22364
				supplier	mold compound	Metal hydroxide	21645-51-2		2.237	mg	20004	8948
				supplier	mold compound	Carbon black	1333-86-4		0.895	mg	8003	3580
Connections coating	Solder	1.972	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.972	mg	1000000	7888
Clip	Copper & its alloys	39.514	mg	supplier	alloy	Copper (Cu)	7440-50-8		39.514	mg	1000000	158056