



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 *	2015-10-05
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		

Uncertainty Statement

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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
	SBVS*A20B3GC	A	Z45A	2015-10-05
Amount	UoM	Unit type	ST ECOPACK Grade	
4480.00	mg	Each	ECOPACK® 2	

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

Package Designator	Size	Nbr of instances	Shape	
SIP	15.3X12.63X4.5	3	Through-hole	
Comment	Package:TOP3 ISOL. MD valid for CPs TPDV1025RG - TPDV1225RG - TPDV825RG			

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)
7c-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound

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	SBV5*A20B3GC					
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	21.263	mg	supplier	die	Silicon (Si)	7440-21-3		18.637	mg	876517	4161
				supplier	metallization	Nickel (Ni)	7440-02-0		1.000	mg	47023	223
				supplier	metallization	Gold (Au)	7440-57-5		0.100	mg	4702	22
				supplier	back side metallization	Gold (Au)	7440-57-5		0.018	mg	846	4
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.380	mg	17869	85
				supplier	glass coating	Glass : Aluminium Oxide	1344-28-1		0.113	mg	5314	25
Leadframe	Copper & its alloys	2689.011	mg	JIG - R	glass coating	Lead-Borate Glass	65997-18-4	7c-I-Electrical and e	1.015	mg	47729	227
				supplier	alloy	Copper (Cu)	7440-50-8		2681.178	mg	997087	598477
				supplier	alloy	Iron (Fe)	7439-89-6		1.235	mg	459	276
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		2.256	mg	839	504
				supplier	metallization	Nickel (Ni)	7440-02-0		4.342	mg	1615	969
Soft solder	Solder	26.625	mg	JIG - R	Lead/Lead Compounds	Lead (Pb)	7439-92-1	7a. Lead in high me	24.893	mg	934948	5556
				supplier	Soft solder	Silver (Ag)	7440-22-4		0.400	mg	15023	89
				supplier	Soft solder	Tin (Sn)	7440-31-5		1.332	mg	50028	297
Ceramic	Other inorganic materials	180.324	mg	supplier	Ceramic	Nickel (Ni)	7440-02-0		2.164	mg	12001	483
				supplier	Ceramic	Phosphorus (P)	12185-10-3		0.163	mg	904	36
				supplier	Ceramic	Manganese (Mn)	7439-96-5		7.033	mg	39002	1570
				supplier	Ceramic	Titanium (Ti)	7440-32-6		0.739	mg	4098	165
				supplier	Ceramic	Molybdenum oxide	1313-27-5		9.016	mg	49999	2013
				supplier	Ceramic	Alumina (Al2O3)	1344-28-1		161.209	mg	893996	35984
Encapsulation	Other inorganic materials	1551.623	mg	supplier	mold compound	Silica, vitreous	60676-86-0		1179.234	mg	760000	263222
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		158.266	mg	102000	35327
				supplier	mold compound	Phenol resin	9003-35-4		93.097	mg	60000	20781
				supplier	mold compound	Others	Proprietary		77.581	mg	50000	17317
				supplier	mold compound	Metal hydroxide	21645-51-2		31.032	mg	20000	6927
Finishing	Solder	11.154	mg	supplier	mold compound	Carbon black	1333-86-4		12.413	mg	8000	2771
				Supplier	solder alloy	Tin (Sn)	7440-31-5		11.154	mg	1000000	2490