



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 *	2016-05-04
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giovanni Giacopello	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


While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.

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 omprehensive 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
SMBJ28CA-TR	8YZG*TWB033D	A	Z54A	2016-05-04
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		 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	4.2, 3.7, 2.37	2	J BEND	
Comment	Package: SMB CLIP (SOD 6)			

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)	false
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	true
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-17th December 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	8YZG*TWB033D						
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	1.272	mg	supplier	die	Silicon (Si)	7440-21-3		1.232	mg	968553	12571	
				supplier	metallization	Aluminium (Al)	7429-90-5		0.009	mg	7075	92	
				supplier	metallization	Nickel (Ni)	7440-02-0		0.007	mg	5503	71	
				supplier	metallization	Gold (Au)	7440-57-5		0.007	mg	5503	71	
				supplier	Passivation	Silicon Oxide	7631-86-9		0.009	mg	7075	92	
				supplier	back side metallization	Aluminium (Al)	7429-90-5		0.006	mg	4717	61	
Leadframe	Copper & its alloys	41.656	mg	supplier	back side metallization	Gold (Au)	7440-57-5		0.002	mg	1572	20	
				supplier	alloy	Copper (Cu)	7440-50-8		40.762	mg	378539	415939	
				supplier	alloy	Iron (Fe)	7439-89-6		0.041	mg	984	418	
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.012	mg	288	122	
				supplier	metallization	Nickel (Ni)	7440-02-0		0.836	mg	20069	8531	
				supplier	metallization	Phosphorus (P)	12185-10-3		0.005	mg	120	51	
Soft solder	Solder	1.573	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high met	1.471	mg	935156	15010	
				supplier	solder	Tin (Sn)	7440-31-5		0.078	mg	49587	796	
				supplier	solder	Silver (Ag)	7440-22-4		0.024	mg	15257	245	
				supplier	mold compound	Silica, vitreous	14808-60-7		25.444	mg	741959	259633	
Encapsulation	Other Organic Materials	34.293	mg	supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		3.773	mg	110022	38500	
				supplier	mold compound	Phenol resin	9003-35-4		4.457	mg	129968	45480	
				supplier	mold compound	inorganic flame retardant	21645-51-2		0.344	mg	10031	3510	
				supplier	mold compound	Carbon black	1333-86-4		0.275	mg	8019	2806	
Connections coating	Solder	0.814	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.814	mg	1000000	8306	
Clip	Copper & its alloys	18.392	mg	supplier	alloy	Copper (Cu)	7440-50-8		18.392	mg	1000000	187673	