



## Materials Declaration Form

<b>IPC Form Type *</b>	1752 Distribute	<b>Version</b>	2
<b>Sectionals *</b>	Material Info Manufacturing Info	<b>Subsectionals *</b>	A-D <i>* : Required Field</i>

<b>Supplier Information</b>			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2017-07-06
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Giovanni Giacopello	<b>Representative Title</b>	ADG MD CHAMPION
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**Uncertainty Statement**


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<b>Legal Statement</b>			
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	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
BTA40-800B	SBVQ*C45C26B	A	Z45A	2017-07-06
Amount	UoM	Unit type	ST ECOPACK Grade	
19955.00	mg	Each	ECOPACK® 1	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
Not Applicable	Not Applicable	Not Applicable		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Not Applicable	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
RAD	69 - 6.5 - 6.5	2	Through-hole	
Comment	Package: RD91(CB332) - MDF valid also for BTA40-700B; BTA40-600B; BTA25-600B			

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

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	11070.01	e, base&cap, gate, anode/cathode me	554749
Lead	131.51	die & die attach metal	6590
Lead-Borate Glass	4.94	die glass coating	248
Antimony Trioxide	84.48	mold compound	4233

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	SBVQ*C45C268						
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	99.945	mg	supplier	die	Silicon (Si)	7440-21-3		22.548	mg	225604	1130	
				supplier	metallization	Nickel (Ni)	7440-02-0		0.452	mg	4522	23	
				supplier	metallization	Gold (Au)	7440-57-5		0.086	mg	860	4	
				JIG - R	metallization	Lead	7439-92-1	7a-Lead in high mel	71.789	mg	718285	3598	
				supplier	Passivation	Silicon Oxide	7631-86-9		0.128	mg	1281	6	
Base&Cap	Other Ferrous alloys, non-stainless ste	11070.010	mg	JIG - R	glass coating	Lead-Borate Glass	65997-18-4	7c-I-Electrical and e	4.942	mg	49447	248	
				supplier	alloy	Iron (Fe)	7439-89-6		10893.019	mg	984012	545879	
				supplier	alloy	Manganese (Mn)	7439-96-5		49.447	mg	4467	2478	
				supplier	alloy	Silicon (Si)	7440-21-3		27.470	mg	2481	1377	
				supplier	alloy	Carbon (C)	7440-44-0		10.438	mg	943	523	
Gate	Other inorganic materials	579.380	mg	supplier	alloy	Sulfur (S)	7783-06-4		3.845	mg	347	193	
				supplier	metallization	Nickel (Ni)	7440-02-0		85.791	mg	7750	4299	
				supplier	alloy	Iron (Fe)	7439-89-6		565.897	mg	976729	28359	
				supplier	alloy	Manganese (Mn)	7439-96-5		2.569	mg	4434	129	
				supplier	alloy	Silicon (Si)	7440-21-3		1.427	mg	2463	72	
Anode & cathode	Other inorganic materials	2272.807	mg	supplier	alloy	Carbon (C)	7440-44-0		0.541	mg	934	27	
				supplier	alloy	Sulfur (S)	7783-06-4		0.200	mg	345	10	
				supplier	alloy	Phosphorus (P)	12185-10-3		0.200	mg	345	10	
				supplier	metallization	Nickel (Ni)	7440-02-0		8.546	mg	14750	428	
				supplier	alloy	Copper (Cu)	7440-50-8		2191.824	mg	964369	109838	
Die Attach	Solder	90.457	mg	supplier	alloy	Iron (Fe)	7439-89-6		1.009	mg	444	51	
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		1.844	mg	811	92	
				supplier	metallization	Nickel (Ni)	7440-02-0		78.130	mg	34376	3915	
				JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	54.775	mg	605536	2745	
				supplier	solder	Silver (Ag)	7440-22-4		0.886	mg	9795	44	
Bonding wire	Other Organic Materials	4.812	mg	supplier	solder	Tin (Sn)	7440-31-5		34.796	mg	384669	1744	
				supplier	wire	Silver (Ag)	7440-22-4		4.812	mg	1000000	241	
				supplier	ceramic	Aluminium oxide	1344-28-1		4.503	mg	1000000	226	
				supplier	plastic	Polybutylene terephthalate	30965-26-5		580.996	mg	400000	29115	
				supplier	plastic	Polyethylene terephthalate	25038-59-9		580.996	mg	400000	29115	
Ceramic	Ceramics / Glass	4.503	mg	supplier	plastic	Brominated Flame retardant	Proprietary		29.050	mg	20000	1456	
				supplier	plastic	Fiber glass	65997-17-3		217.874	mg	150000	10918	
				supplier	plastic	Zinc hydroxide	20427-58-1		2.905	mg	2000	146	
				supplier	plastic	Antimony trioxide	1309-64-4		40.670	mg	28000	2038	
				supplier	plastic	Amorphous silicon dioxide	7631-86-9		2628.357	mg	600000	131714	
Encapsulation	Other Organic Materials	4380.595	mg	supplier	mold compound	Crystalline silica	25359-84-6		657.090	mg	150000	32929	
				supplier	mold compound	Epoxy resin	129915-35-1		547.574	mg	125000	27440	
				supplier	mold compound	Decabromodiphenylethane	84852-53-9		175.223	mg	40000	8781	
				supplier	mold compound	Antimony trioxide	1309-64-4		43.806	mg	10000	2195	
				supplier	mold compound	amorphous silica	7631-86-9		328.545	mg	75000	16464	