



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-10-31
Company Unique ID	NL 008751171801		
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Authorized Representative *	Floriana SAN BIAGIO	Representative Title	AMS 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
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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
	SB6R*V994ARL	A	ZY1A	2018-10-31
Amount	UoM	Unit type	ST ECOPACK Grade	
54	mg	Each	ECOPACK® 3	
	Comment	ECOPACK® 3 is STMicroelectronics trade name for ROHS compliant device without use of any ROHS exemption and without Halogen nor Antimony		

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	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	5x4.4x0.9	14	gull wing	
Comment	6R TSSOP 14 BODY 4.4 PITCH 0.65; MDF valid for TSV994AIPT			

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	TRUE
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	FALSE
Exemption Id.	Description

QueryList : ELV directive : 2000/53/EC amended 2016/774 _May 2016	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	TRUE
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	FALSE
Exemption Id.	Description

QueryList : REACH-27th June 2018				
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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	SB6R*V994ARL				5999997.0	1000037.0
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	M-011 Other inorganic materials	1.385	mg	supplier	die	Silicon (Si)	7440-21-3		1.340	mg	967509	24815
				supplier	metallization	Aluminium (Al)	7429-90-5		0.012	mg	8664	222
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	722	19
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	722	19
				supplier	Passivation	Silicon Nitride	12033-89-5		0.003	mg	2166	56
				supplier	Passivation	Silicon Oxide	7631-86-9		0.028	mg	20217	519
Leadframe	M-004 Copper and its alloys	18.844	mg	supplier	alloy	Copper (Cu)	7440-50-8		18.197	mg	965665	336981
				supplier	alloy	Iron (Fe)	7439-89-6		0.439	mg	23297	8130
				supplier	alloy	Zinc (Zn)	7440-66-6		0.022	mg	1167	407
				supplier	alloy	Metallic Phosphorus (P)	7723-14-0		0.006	mg	318	111
				supplier	metallization	Silver (Ag)	7440-22-4		0.180	mg	9552	3333
				supplier	glue	Silver (Ag)	7440-22-4		0.405	mg	747232	7500
Die attach	M-015 Other organic materials	0.542	mg	supplier	glue	Reaction product: bisphenol-F-(epichlorhydrin)	9003-36-5		0.038	mg	70111	704
				supplier	glue	Fatty acids, C18-unsatd., dimers, polymers with	68475-94-5		0.022	mg	40590	407
				supplier	glue	gamma- Butyrolactone	96-48-0		0.022	mg	40590	407
				supplier	glue	Polyoxyalkylene amine	9046-10-0		0.022	mg	40590	407
				supplier	glue	Epoxy Resin	Proprietary		0.022	mg	40590	407
				supplier	glue	Copper Oxide	1317-38-0		0.005	mg	9225	93
				supplier	glue	Epoxy Resin Modifier	Proprietary		0.003	mg	5535	56
				supplier	glue	Substituted Silane	Proprietary		0.003	mg	5535	56
				supplier	wire	Gold (Au)	7440-57-5		0.290	mg	1000000	5370
Encapsulation	M-015 Other organic materials	31.652	mg	supplier	molding compound	Epoxy Resin	Proprietary		2.690	mg	84987	49815
				supplier	molding compound	Phenol Resin	205830-20-2		1.266	mg	39997	23444
				supplier	molding compound	Silica Amorphous A	60676-86-0		25.006	mg	790029	463074
				supplier	molding compound	Silica Amorphous B	7631-86-9		2.532	mg	79995	46889
connections coating	Solder	1.289	mg	supplier	molding compound	Carbon Black	1333-86-4		0.158	mg	4992	2926
				supplier	coating	Tin (Sn)	7440-31-5		1.289	mg	1000000	23870