



## 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

*\* : Required Field*


Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2017-01-23
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Antonella Lanzafame	<b>Representative Title</b>	AMG 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**

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			
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	Standard
<b>Legal Statement</b>	<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
ALTAIR04-900TR	BSQ7*MT06BA6	A	Z7GA SC	2017-01-23
	Amount	UoM	Unit type	ST ECOPACK Grade
	150.00	mg	Each	ECOPACK® 2
	Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant ( in each organic material)		

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	3,9,9,1.25	16	gull wing	
Comment	SO 16 .15 TO JEDEC MS-012			

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

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-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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	BSQ7*MT06BA6									
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)				
Die or Dies (choose)	Other inorganic materials	1.768	mg	supplier	die	Silicon (Si)	7440-21-3		1.606	mg	908010	9673				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.054	mg	30663	327				
				supplier	metallization	Tungsten (W)	7440-33-7		0.010	mg	5632	60				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.017	mg	9387	100				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.043	mg	24406	260				
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	626	7				
				supplier	back side metallization	Gold (Au)	7440-57-5		0.004	mg	2503	27				
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.020	mg	11264	120				
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.013	mg	7509	80				
				supplier	alloy	Cu	7440-50-8		54.110	mg	972089	325993				
Leadframe	Copper & its alloys	55.441	mg			Fe	7439-89-6		1.236	mg	22205	7447				
						P	7723-14-0		0.019	mg	338	113				
						Zn	7440-66-6		0.076	mg	1372	460				
					Leadframe coating	0.223	mg	supplier	coating	Ni	7440-02-0		0.214	mg	3837	1287
									Pd	7440-05-3		0.007	mg	119	40	
									Au	7440-57-5		0.002	mg	40	13	
Die attach	Die Attach	0.499	mg	supplier	glue	Acrylate resin	Proprietary		0.080	mg	159645	480				
						Silver (Ag)	7440-22-4		0.399	mg	800443	2407				
						Heterocyclic organic compound	Proprietary		0.010	mg	19956	60				
						Treated Silica	Proprietary		0.010	mg	19956	60				
Bonding wires	Bonding wire	0.113	mg	supplier	Bonding wire	Gold (Au)	7440-57-5		0.113	mg	1000000	680				
Encapsulation	Encapsulation	91.956	mg	supplier	Moulding Compound	Silica fused	60676-86-0		78.163	mg	850002	470907				
						Epoxy resin	25068-38-6		7.817	mg	85005	47093				
						Phenol resin A	Proprietary		2.942	mg	31997	17727				
						Phenol resin B	Proprietary		2.942	mg	31997	17727				
					Carbon black	1333-86-4		0.092	mg	999	553					