



## 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>

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2015-03-26
<b>Contact Name *</b>	Refer to "Supplier Comment" section	<b>Contact Title</b>	Refer to "Supplier Comment" section
<b>Contact Phone *</b>	Refer to "Supplier Comment" section	<b>Contact Email *</b>	Refer to "Supplier Comment" section
<b>Authorized Representative *</b>	Giovanni Giacobello	<b>Representative Title</b>	AMS & IPD Materials Declaration 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/internet/com/support/online_tech_support.jsp">http://www.st.com/internet/com/support/online_tech_support.jsp</a>		

**Uncertainty Statement**


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Legal Statement			
<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 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
	GB6R*V524AAJ	A	ZY1A	2015-03-26
Amount	UoM	Unit type	ST ECOPACK Grade	
54.00	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	
Not Applicable ; if coating is used c	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	5,4,4,0,9	14	gull wing	
Comment	Package: TSSOP 14 BODY 4.4 PITCH 0.65; MDF valid for TSV524AIPT			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	true
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
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
Product(s) is unknown, no information is available	false
Exemption Id.	Description

QueryList : REACH-17th December 2014				
Query				Response
The product 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	GB6R*V524AAJ						
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)	
Silicon die	Other inorganic materials	0.694	mg	supplier	die	Silicon (Si)	7440-21-3		0.679	mg	978386	12574	
Silicon die				supplier	metallization	Aluminium (Al)	7429-90-5		0.006	mg	8646	111	
Silicon die				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1441	19	
Silicon die				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1441	19	
Silicon die				supplier	passivation	Silicon Nitride (SiN)	12033-89-5		0.002	mg	2882	37	
Silicon die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.005	mg	7205	93	
Lead-frame	Copper & its alloys	25.271	mg	supplier	alloy	Copper (Cu)	7440-50-8		24.032	mg	950971	445037	
Lead-frame				supplier	alloy	Iron (Fe)	7439-89-6		0.593	mg	23466	10981	
Lead-frame				supplier	alloy	Zinc (Zn)	7440-66-6		0.032	mg	1266	593	
Lead-frame				supplier	alloy	Phosphorus (P)	7723-14-0		0.011	mg	435	204	
Lead-frame				supplier	metallization	Iron (Fe)	7439-89-6		0.603	mg	23861	11167	
Die attach	Other inorganic materials	0.604	mg	supplier	glue or tape	Silver (Ag)	7440-22-4		0.484	mg	801325	8963	
Die attach				supplier	glue or tape	Iron Phosphide (Fe2P)	1310-43-6		0.048	mg	79470	889	
Die attach				supplier	glue or tape	Epoxy resin	68475-94-5		0.018	mg	29801	333	
Die attach				supplier	glue or tape	2,6-Diglycidyl phenyl allyl ether	EC 417-470-1		0.018	mg	29801	333	
Die attach				supplier	glue or tape	Gamma Butyrolactone	96-48-0		0.018	mg	29801	333	
Die attach				supplier	glue or tape	Polyoxypropylenediamine	9046-10-0		0.018	mg	29801	333	
Bonding wire	Precious metals	0.267	mg	supplier	wire	Gold (Au)	7440-57-5		0.267	mg	1000000	4944	
encapsulation	Other Organic Materials	25.911	mg	supplier	mold compound	Multi-aromatic resin	Trade Secret		2.332	mg	90000	43185	
encapsulation				supplier	mold compound	Silica Fused	60676-86-0		21.765	mg	839991	403056	
encapsulation				supplier	mold compound	Phenol Resin	Trade Secret		1.685	mg	65030	31204	
encapsulation				supplier	mold compound	Carbon Black	1333-86-4		0.129	mg	4979	2389	
connections coating	Solder	1.253	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.253	mg	1000000	23204	