



## 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>	2015-08-03
<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>	Flavio Di Francesco	<b>Representative Title</b>	AMS 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/web/en/support/online_tech_support.html">http://www.st.com/web/en/support/online_tech_support.html</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
	AYWY*UY30ABA	A	ZS1A	2015-08-03
Amount	UoM	Unit type	ST ECOPACK Grade	
16.38	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used or other bulk termination : add in comments	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
SOT	2.9 - 1.6 - 1.05	5	gull wing	
Comment	Package: SOT 23-5; MD valid for TSX921ILT			

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-15th June 2015				
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	AYWY*UY30ABA					
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	1.131	mg	supplier	die	Silicon (Si)	7440-21-3		1.044	mg	923077	63756
Silicon Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.015	mg	13263	916
Silicon Die				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	1768	122
Silicon Die				supplier	Passivation	Silicon Nitride	12033-89-5		0.004	mg	3537	244
Silicon Die				supplier	Passivation	Silicon Oxide	7631-86-9		0.025	mg	22104	1527
Silicon Die				supplier	glass coating	Glass: Silicon Dioxide	7631-86-9		0.025	mg	22104	1527
Silicon Die				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.016	mg	14147	977
Lead-frame	Copper & its alloys	7.23	mg	supplier	alloy	Copper (Cu)	7440-50-8		6.965	mg	963247	425344
Lead-frame				supplier	alloy	Iron (Fe)	7439-89-6		0.163	mg	22545	9954
Lead-frame				supplier	alloy	Phosphorus (P)	12185-10-3		0.002	mg	277	122
Lead-frame				supplier	alloy	Zinc (Zn)	7440-66-6		0.009	mg	1245	550
Lead-frame				supplier	metallization	Nickel (Ni)	7440-02-0		0.083	mg	11480	5069
Lead-frame				supplier	metallization	Palladium (Pd)	7440-05-3		0.007	mg	968	427
Lead-frame				supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	138	61
Die Attach	Other Organic Material	0.07	mg	Supplier	Glue	Epoxyde Bisphenol A Resin	25068-38-6		0.02	mg	285714	1221
Die Attach				Supplier	Glue	Aromatic amine	Proprietary		0.003	mg	42857	183
Die Attach				Supplier	Glue	Glycol ether ester	Proprietary		0.003	mg	42857	183
Die Attach				Supplier	Glue	silica	60676-86-0		0.021	mg	300000	1282
Die Attach				Supplier	Glue	Aluminium oxide	1344-28-1		0.023	mg	328571	1405
Bonding Wire	Precious Metals	0.151	mg	Supplier	Bonding Wire	Gold (Au)	7440-57-5		0.151	mg	1000000	9221
encapsulation	Other Inorganic Material	7.793	mg	supplier	mold compound	Silica, vitreous	60676-86-0		6.648	mg	853073	405985
encapsulation				supplier	mold compound	phenolic resin	Proprietary		0.273	mg	35031	16672
encapsulation				supplier	mold compound	epoxy resin	Proprietary		0.311	mg	39908	18992
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.156	mg	20018	9527
encapsulation				supplier	mold compound	carbon black	1333-86-4		0.016	mg	2053	977
encapsulation				supplier	mold compound	Zinc hydroxide	30427-58-1		0.078	mg	10009	4763
encapsulation				supplier	mold compound	Magnesium hydroxide	1309-42-8		0.311	mg	39908	18992