




## 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

<b>Supplier Information</b>			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2016-01-08
<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>	Floriana San Biagio	<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/internet/com/support/online_tech_support.jsp">http://www.st.com/internet/com/support/online_tech_support.jsp</a>		

<b>Uncertainty Statement</b>	
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<b>Legal Statement</b>	
<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
	HBYM*UQ85BB5	A	ZY1A	2016-01-08
Amount	UoM	Unit type	ST ECOPACK Grade	
84.00	mg	Each	ECOPACK® 3	

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	
Not Applicable ; if coating is used o	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	9.7x4.4x0.9	28	gull wing	
Comment	Package: YM TSSOP 28 BODY 4.4 PITCH 0.65; MDF valid for ST8024LACTR			

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 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	HBYM*UQ85BB5					
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	1.924	mg	supplier	Die	Silicon (Si)	7440-21-3		1.838	mg	955301	21881
Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.019	mg	9875	226
Die				supplier	metallization	Tungsten (W)	7440-33-7		0.015	mg	7796	179
Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.004	mg	2079	48
Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.032	mg	16632	381
Die				supplier	passivation	Gamma-butyrolactone	96-48-0		0.011	mg	5717	131
Die				supplier	passivation	Polyhydroxyamide	55295-98-2		0.005	mg	2599	60
Leadframe	Copper and its alloy	36.004	mg	supplier	alloy	Copper (Cu)	7440-50-8		33.446	mg	928952	398167
Leadframe			mg	supplier	alloy	Nickel (Ni)	7440-02-0		1.199	mg	33302	14274
Leadframe			mg	supplier	alloy	Silicon (Si)	7440-21-3		0.26	mg	7221	3095
Leadframe			mg	supplier	alloy	Magnesium (Mg)	7439-95-4		0.06	mg	1666	714
Leadframe			mg	supplier	coating	Silver(Ag)	7440-22-4		1.039	mg	28858	12369
Die Attach	Other organic materials	0.009	mg	supplier	glue	Epoxy resin A	9003-36-5		0.001	mg	111111	12
Die Attach			mg	supplier	glue	Silver(Ag)	7440-22-4		0.008	mg	888889	84
Bonding Wire	Precious metals	0.457	mg	supplier	wire	Gold (Au)	7440-57-5		0.457	mg	1000000	5440
Encapsulation	Other inorganic materials	42.884	mg	supplier	molding compound	Epoxy Resin	Proprietary		4.399	mg	102579	52369
Encapsulation			mg	supplier	molding compound	Silica fused (SiO2)	60676-86-0		35.063	mg	817624	417417
Encapsulation			mg	supplier	molding compound	Carbon Black	1333-86-4		0.245	mg	5713	2917
Encapsulation			mg	supplier	molding compound	Phenol Resin	Proprietary		3.177	mg	74084	37821
Finishing	Other inorganic materials	2.722	mg	supplier	connection coating	Tin (Sn)	7440-31-5		2.722	mg	1000000	32405