



## 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>

<b>Supplier Information</b>			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2015-04-20
<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 Giacopello	<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/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**Uncertainty Statement**


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<b>Legal Statement</b>			
<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
	B59U*L262DA6	A	MU1A	2015-04-20
Amount	UoM	Unit type	ST ECOPACK Grade	
648.00	mg	Each	ECOPACK® 1	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
3	250	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	7.5,15.4,2.50	24	gull wing	
Comment	Package: SO 24 .30 TO JEDEC MS-013AD; MDF valid for E-L6219DSA; E-L6219DSATR			

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	B59U*L262DA6					
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	Other inorganic materials	10.173	mg	supplier	die	Silicon (Si)	7440-21-3		9.794	mg	962745	15114
Die or Dies				supplier	metallization	Aluminum (Al)	7429-90-5		0.122	mg	11993	188
Die or Dies				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.042	mg	4129	65
Die or Dies				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.060	mg	5898	93
Die or Dies				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.008	mg	786	12
Die or Dies				supplier	back side metallization	Gold (Au)	7440-57-5		0.020	mg	1966	31
Die or Dies				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.067	mg	6586	103
Die or Dies				supplier	glass coating	Glass: Silicon Dioxide (SiO2)	7631-86-9		0.060	mg	5898	93
Leadframe	Copper & its alloys	205.948	mg	supplier	alloy	Copper (Cu)	7440-50-8		200.240	mg	972284	309012
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		4.710	mg	22870	7269
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.284	mg	1379	438
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.247	mg	1199	381
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.429	mg	2083	662
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.027	mg	131	42
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.011	mg	53	17
Die attach	Other inorganic materials	2.160	mg	supplier	glue or tape	Silver (Ag)	7440-22-4		1.663	mg	769907	2566
Die attach				supplier	glue or tape	Epoxy Cresol Novolak	29690-82-2		0.488	mg	225926	753
Die attach				supplier	glue or tape	1-isopropyl-2,2-dimethyltrimethylene diisobutyl	6846-50-0		0.009	mg	4167	14
Bonding wire	Precious metals	0.780	mg	supplier	wire	Gold (Au)	7440-57-5		0.780	mg	1000000	1204
encapsulation	Other inorganic materials	428.939	mg	supplier	mold compound	Silica, vitreous	60676-86-0		343.151	mg	800000	529554
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		30.026	mg	70001	46336
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		17.158	mg	40001	26478
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		25.736	mg	59999	39716
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		5.147	mg	11999	7943
encapsulation				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		6.434	mg	15000	9929
encapsulation				supplier	mold compound	Carbon black	1333-86-4		1.287	mg	3000	1986