



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D <i>* : Required Field</i>

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2012-12-11
Contact Name *	Refer to "Supplier Comment" section	Contact Title	Refer to "Supplier Comment" section
Contact Phone *	Refer to "Supplier Comment" section	Contact Email *	Refer to "Supplier Comment" section
Authorized Representative *	Arcidiacono Salvatore	Representative Title	AMG Materials Declaration Champion)
Representative Phone *	Refer to "Supplier Comment" section	Representative Email *	Refer to "Supplier Comment" section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/internet/com/support/online_tech_support.jsp		

Uncertainty Statement


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Legal Statement			
Supplier Acceptance *	true	Legal Declaration *	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
ALED1642GWXTTR	B9YO*UI73ACA	B	ZY1A	2012-12-11
Amount	UoM	Unit type	ST ECOPACK Grade	
88.00	mg	ZY1A	ECOPACK® 2	

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	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOJ	4.4 x 7.8 x 1	24	gull wing	
Comment				

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-19 December 2012				
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	B9YO*UI73ACA					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die (s)	Other inorganic materials	2.522	mg	supplier	die	Silicon (Si)	7440-21-3		2.41	mg	955591	27386
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.025	mg	9913	284
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.02	mg	7930	227
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.005	mg	1983	57
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.042	mg	16653	477
die (s)				supplier	passivation	Gamma-butyrolactone	96-48-0		0.014	mg	5551	159
die (s)				supplier	passivation	Polyhydroxyamide	55295-98-2		0.006	mg	2379	68
Leadframe	Copper & its alloys	36.729	mg	supplier	alloy	Copper (Cu)	7440-50-8		35.62	mg	969806	404773
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.838	mg	22816	9523
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.05	mg	1361	568
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.044	mg	1198	500
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.163	mg	4438	1852
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.01	mg	272	114
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.004	mg	109	45
Die attach	Other inorganic materials	0.709	mg	supplier	glue or tape	Silver (Ag)	7440-22-4		0.568	mg	801128	6455
Die attach				supplier	glue or tape	Bisphenol F type epoxy resin	9003-36-5		0.057	mg	80395	648
Die attach				supplier	glue or tape	Epoxy resin	68475-94-5		0.021	mg	29619	239
Die attach				supplier	glue or tape	2,6-Diglycidyl phenyl allyl ether	EC 417-470-1		0.021	mg	29619	239
Die attach				supplier	glue or tape	Gamma Butyrolactone	96-48-0		0.021	mg	29619	239
Die attach				supplier	glue or tape	Polyoxypropylenediamine	9046-10-0		0.021	mg	29619	239
Bonding wire	Precious metals	0.469	mg	supplier	wire	Gold (Au)	7440-57-5		0.469	mg	1000000	5330
encapsulation	Other Organic Materials	47.571	mg	supplier	mold compound	Epoxy Resin	Proprietary		3.568	mg	75004	40545
encapsulation				supplier	mold compound	Phenol Resin	Proprietary		2.379	mg	50009	27034
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		41.196	mg	865990	468136
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.237	mg	4982	2693
encapsulation				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.191	mg	4015	2170