



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 *	2015-04-28
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 *	Flavio Di Francesco	Representative Title	AMS 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
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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
	EBE3*UY19AAA	A	ZY1A	2015-04-28
Amount	UoM	Unit type	ST ECOPACK Grade	
23.71	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	
DSO	3X3X0.86	8	gull wing	
Comment	Package: MSOP/TSSOP 8 BODY3.00 PITCH0.65; MD valid for TSX7121ST			

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	EBE3*UY19AAA					
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	1.447	mg	supplier	die	Silicon (Si)	7440-21-3		1.386	mg	957844	58469
Die or Dies				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	691	42
Die or Dies				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	691	42
Die or Dies				supplier	Passivation	Silicon Nitride	12033-89-5		0.005	mg	3455	211
Die or Dies				supplier	Passivation	Silicon Oxide	7631-86-9		0.033	mg	22806	1392
Die or Dies				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.021	mg	14513	886
Leadframe	Copper & its alloys	10.539	mg	supplier	alloy	Copper (Cu)	7440-50-8		9.937	mg	942879	419194
Leadframe				supplier	alloy	Nickel (Ni)	7440-02-0		0.31	mg	29415	13077
Leadframe				supplier	alloy	Silicon (Si)	7440-21-3		0.067	mg	6357	2826
Leadframe				supplier	alloy	Magnesium (Mg)	7439-95-4		0.015	mg	1423	633
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.204	mg	19357	8606
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.004	mg	380	169
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.002	mg	190	84
Die attach	Other inorganic materials	0.368	mg	supplier	glue	Epoxy resin A	9003-36-5		0.026	mg	70652	1097
Die attach				supplier	glue	Epoxy resin B	68475-94-5		0.015	mg	40761	633
Die attach				supplier	glue	Silver(Ag)	7440-22-4		0.282	mg	766304	11896
Die attach				supplier	glue	Lactone	96-48-0		0.015	mg	40761	633
Die attach				supplier	glue	Polyoxypropylenediamine	9046-10-0		0.015	mg	40761	633
Die attach				supplier	glue	2,6-Diglycidyl phenyl allyl ether oligomer	EC 417-470-1		0.015	mg	40761	633
Bonding wire	Precious metals	0.078	mg	supplier	wire	Gold (Au)	7440-57-5		0.078	mg	1000000	5290
encapsulation	Other inorganic materials	11.273	mg	supplier	mold compound	Epoxy Resin	proprietary		1.28	mg	113546	53997
encapsulation				supplier	mold compound	Silica fused (SiO2)	60676-86-0		8.997	mg	798102	379540
encapsulation				supplier	mold compound	Phenol Resin	proprietary		0.925	mg	82054	39021
encapsulation				supplier	mold compound	Carbon Black	1333-86-4		0.071	mg	6298	2995