



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2015-09-17
Contact Name *	Refer to Supplier Comment section		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/web/en/support/support.html		

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
	EBE3*UY19AAY	A	ZY1A	2015-09-17
	Amount	UoM	Unit type	ST ECOPACK Grade
	23.71	mg	Each	ECOPACK® 3

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	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 TSX712IYST			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	true
2 - 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
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Exemption Id.	Description

QueryList : REACH-15th June 2015				
Query				Response
1 - Product(s) 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*UY19AAY					
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	1.485	mg	supplier	die	Silicon (Si)	7440-21-3		1.391	mg	936700	58680
Die or Dies				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	673	42
Die or Dies				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	673	42
Die or Dies				supplier	Passivation	Silicon Nitride	12033-89-5		0.005	mg	3367	211
Die or Dies				supplier	Passivation	Silicon Oxide	7631-86-9		0.033	mg	22222	1392
Die or Dies				supplier	glass coating	Glass: Silicon Dioxide	7631-86-9		0.033	mg	22222	1392
Die or Dies				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.021	mg	14141	886
Leadframe	Copper & its alloys	9.253	mg	supplier	alloy	Copper (Cu)	7440-50-8		8.724	mg	942829	368024
Leadframe				supplier	alloy	Nickel (Ni)	7440-02-0		0.272	mg	29396	11474
Leadframe				supplier	alloy	Silicon (Si)	7440-21-3		0.059	mg	6376	2489
Leadframe				supplier	alloy	Magnesium (Mg)	7439-95-4		0.013	mg	1405	548
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.179	mg	19345	7551
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.004	mg	432	169
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.002	mg	216	84
Die attach	Other inorganic materials	0.323	mg	supplier	glue	Epoxy resin A	9003-36-5		0.023	mg	71207	970
Die attach				supplier	glue	Epoxy resin B	68475-94-5		0.013	mg	40248	548
Die attach				supplier	glue	Silver(Ag)	7440-22-4		0.248	mg	767802	10462
Die attach				supplier	glue	Lactone	96-48-0		0.013	mg	40248	548
Die attach				supplier	glue	Polyoxypropylenediamine	9046-10-0		0.013	mg	40248	548
Die attach				supplier	glue	2,6-Diglycidyl phenyl allyl ether oligomer	proprietary		0.013	mg	40248	548
Bonding wire	Precious metals	0.069	mg	supplier	wire	Gold (Au)	7440-57-5		0.069	mg	1000000	2911
encapsulation	Other inorganic materials	12.575	mg	#N/A	mold compound	Epoxy Resin	proprietary		1.200	mg	95427	50622
encapsulation				supplier	mold compound	Silica fused (SiO2)	60676-86-0		10.500	mg	834990	442945
encapsulation				supplier	mold compound	Phenol Resin	Trade secret		0.812	mg	64573	34254
encapsulation				supplier	mold compound	Carbon Black	1333-86-4		0.062	mg	4930	2615
encapsulation				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	80	42