



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 *	2015-06-25
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
	9YE3*V912AUJ	A	ZS1A	2015-06-25
Amount	UoM	Unit type	ST ECOPACK Grade	
23.70	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	Tin (Sn), matte, annealed	Copper Alloy		



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Package Designator	Size	Nbr of instances	Shape	
SOJ	3 - 3 - 0.85	8	J bend	
Comment	Package: MSOP/TSSOP 8 BODY3.00 PITCH0.65; MD valid for TSV912AIST - TSV912IST			

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	9YE3*V912AUJ					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Silicon Die	Other inorganic materials	0.795	mg	supplier	die	Silicon (Si)	7440-21-3		0.768	mg	966038	32405
Silicon Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	8805	295
Silicon Die				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1258	42
Silicon Die				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1258	42
Silicon Die				supplier	Passivation	Silicon Nitride	12033-89-5		0.002	mg	2516	84
Silicon Die				supplier	Passivation	Silicon Oxide	7631-86-9		0.016	mg	20126	675
Lead-frame	Copper & its alloys	8.982	mg	supplier	alloy	Copper (Cu)	7440-50-8		8.608	mg	958361	363207
Lead-frame				supplier	alloy	Iron (Fe)	7439-89-6		0.248	mg	27611	10464
Lead-frame				supplier	alloy	Phosphorus (P)	12185-10-3		0.002	mg	223	84
Lead-frame				supplier	alloy	Zinc (Zn)	7440-66-6		0.014	mg	1559	591
Lead-frame				supplier	metallization	Silver (Ag)	7440-22-4		0.11	mg	12247	4641
Die attach	Other inorganic materials	0.23	mg	supplier	glue or tape	Silver (Ag)	7440-22-4		0.158	mg	686957	6667
Die attach				supplier	glue or tape	methylene diacrylate	42594-17-2		0.058	mg	252174	2447
Die attach				supplier	glue or tape	Dicyclopentenylxyethyl methacrylate	68586-19-6		0.007	mg	30435	295
Die attach				supplier	glue or tape	Polymer of Polybutadiene + Anhydride	Proprietary		0.007	mg	30435	295
Bonding wire	Precious metals	0.343	mg	supplier	wire	Gold (Au)	7440-57-5		0.343	mg	1000000	14473
Encapsulation	Other inorganic materials	12.592	mg	supplier	molding compound	Silica, vitreous	60676-86-0		10.44	mg	829098	440506
Encapsulation				supplier	molding compound	phenolic resin	Proprietary		0.512	mg	40661	21603
Encapsulation				supplier	molding compound	epoxy resin	Proprietary		0.586	mg	46537	24726
Encapsulation				supplier	molding compound	Biphenyl epoxy resin	85954-11-6		0.292	mg	23189	12321
Encapsulation				supplier	molding compound	carbon black	1333-86-4		0.029	mg	2303	1224
Encapsulation				supplier	molding compound	Zinc hydroxide	20427-58-1		0.147	mg	11674	6203
Encapsulation				supplier	molding compound	Magnesium hydroxide	1309-42-8		0.586	mg	46537	24726
connections coating	Solder	0.758	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.758	mg	1000000	31983