	Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	**Response Date ***	2017-06-07
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 *	Antonella Lanzafame	**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/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 omprehensive 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**
TSV6392IST	HYE3*6392AAL	A	ZS1A	2017-06-07
	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**		
1	260	3		
bulk Solder Termination	**Terminal Plating**	**Terminal Base Alloy**	**Comment**	
Not Applicable ; if coating is used o	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	**Size**	**Nbr of instances**	**Shape**	
SOJ	3 - 3 - 0.85	8	J bend	
Comment	Package: MSOP/TSSOP 8 BODY3.00 PITCH0.65			

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-12th January 2017				
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	HYE3*6392AAL					
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	0.689	mg	supplier	Silicon Die	Silicon (Si)	7440-21-3		0.665	mg	988113	28047
Silicon Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.006	mg	8915	253
Silicon Die				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1486	42
Silicon Die				supplier	passivation	Titanium Nitride (TiN)	25583-20-4		0.001	mg	1486	42
Die Attach				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.002	mg	9346	84
Die Attach				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.014	mg	65421	590
Lead-frame	Copper & its alloys	9.396	mg	supplier	alloy	Copper (Cu)	7440-50-8		9.076	mg	965943	382792
Lead-frame				supplier	alloy	Iron (Fe)	7439-89-6		0.212	mg	22563	8941
Lead-frame				supplier	alloy	Phosphorus (P)	12185-10-3		0.002	mg	213	84
Lead-frame				supplier	alloy	Zinc (Zn)	7440-66-6		0.012	mg	1277	506
Lead-frame				supplier	metallization	Silver (Ag)	7440-22-4		0.094	mg	10004	3965
Die attach	Solder	0.198	mg	supplier	glue or tape	Silver (Ag)	7440-22-4		0.136	mg	635514	5736
Die attach				supplier	glue or tape	methylene diacrylate	42594-17-2		0.05	mg	233645	2109
Die attach				supplier	glue or tape	Dicyclopentenyloxyethyl methacrylate	68586-19-6		0.006	mg	28037	253
Die attach				supplier	glue or tape	Polymer of Polybutadiene + Anhydride	Proprietary		0.006	mg	28037	253
Bonding wire	Precious metals	0.294	mg	supplier	wire	Gold (Au)	7440-57-5		0.294	mg	1000000	12400
Encapsulation	Other inorganic materials	12.484	mg	supplier	molding compound	Silica, vitreous	60676-86-0		10.643	mg	852531	448882
Encapsulation				supplier	molding compound	phenolic resin	25068-38-6		0.438	mg	35085	18473
Encapsulation				supplier	molding compound	epoxy resin	29690-82-2		0.501	mg	40131	21130
Encapsulation				supplier	molding compound	Biphenyl epoxy resin	85954-11-6		0.25	mg	20026	10544
Encapsulation				supplier	molding compound	carbon black	1333-86-4		0.025	mg	2003	1054
Encapsulation				supplier	molding compound	Zinc hydroxide	20427-58-1		0.126	mg	10093	5314
Encapsulation				supplier	molding compound	Magnesium hydroxide	1309-42-8		0.501	mg	40131	21130
connections coating	Solder	0.649	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.649	mg	1000000	27372