



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 *	2013-05-13
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 *		Representative Title	AMS & IPD 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
TSV714IPT	FB6R*V7A4ABJ	A	ZY1A	2013-05-13
Amount	UoM	Unit type	ST ECOPACK Grade	
54.00	mg	Each	ECOPACK® 2	

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	
Not Applicable ; if coating is used o	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	5,4,4,0.9	14	gull wing	
Comment	TSSOP 14 BODY 4.4 PITCH 0.65			

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-18 June 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	FB6R*V7A4ABJ					
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	4.096	mg	supplier	Silicon Die	Silicon (Si)	7440-21-3		4.017	mg	980713	74389
Silicon Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.014	mg	3418	259
Silicon Die				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	488	37
Silicon Die				supplier	metallization	Tungsten (W)	7440-33-7		0.013	mg	3174	241
Silicon Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.005	mg	1221	93
Silicon Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.032	mg	7813	593
Silicon Die				supplier	passivation	Gamma-butyrolactone	96-48-0		0.009	mg	2197	167
Silicon Die				supplier	passivation	Polyhydroxyamide	55295-98-2		0.004	mg	977	74
Lead-frame	Copper & its alloys	23.657	mg	supplier	alloy	Copper (Cu)	7440-50-8		22.497	mg	950966	416611
Lead-frame				supplier	alloy	Iron (Fe)	7439-89-6		0.555	mg	23460	10278
Lead-frame				supplier	alloy	Zinc (Zn)	7440-66-6		0.03	mg	1268	556
Lead-frame				supplier	alloy	Phosphorus (P)	7723-14-0		0.01	mg	423	185
Lead-frame				supplier	alloy	Silver (Ag)	7440-22-4		0.565	mg	23883	10463
DIE ATTACH	Solder	0.568	mg	supplier	glue or tape	Resin A	9003-36-5		0.04	mg	70423	741
DIE ATTACH				supplier	glue or tape	Resin B	68475-94-5		0.023	mg	40493	426
DIE ATTACH				supplier	glue or tape	Silver (Ag)	7440-22-4		0.436	mg	767606	8074
DIE ATTACH				supplier	glue or tape	Lactone	96-48-0		0.023	mg	40493	426
DIE ATTACH				supplier	glue or tape	Polyoxypropylenediamine	9046-10-0		0.023	mg	40493	426
DIE ATTACH				supplier	glue or tape	2,6-Diglycidyl phenyl allyl ether oligomer	Trade secret		0.023	mg	40493	426
BONDING WIRE	Other inorganic materials	0.25	mg	supplier	wire	Gold (Au)	7440-57-5		0.25	mg	1000000	4630
ENCAPSULATION	Other Organic Materials	24.256	mg	supplier	mold compound	Multi-aromatic resin	Trade Secret		2.183	mg	89998	40426
ENCAPSULATION				supplier	mold compound	Silica Fused	60676-86-0		20.375	mg	839998	377315
ENCAPSULATION				supplier	mold compound	Phenol Resin	Trade Secret		1.577	mg	65015	29204
ENCAPSULATION				supplier	mold compound	Carbon Black	1333-86-4		0.121	mg	4988	2241
FINISHING	Solder	1.173	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.173	mg	1000000	21722