



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 *	2014-08-28
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 *	Giuseppe Vitali Palma	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
TSV914AIYDT	FDK7*V914ARY	A	BO2A	2014-08-28
Amount		UoM	Unit type	ST ECOPACK Grade
133.919		mg	Each	ECOPACK® 1

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
3	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	8.6X3.9X1.52	16	gull wing	
Comment	Package: SO 14 .15 TO JEDEC MS-012; MD valid for TSV914AIYDT, TSV914IYDT			

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-16th December 2013				
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	FDK7*V914ARY					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die (s)	Other inorganic materials	3.621	mg	supplier	die	Silicon (Si)	7440-21-3		3.542	mg	978183	26449
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.02	mg	5523	149
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.011	mg	3038	82
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.048	mg	13256	358
Leadframe	Copper & its alloys	36.531	mg	supplier	alloy	Copper (Cu)	7440-50-8		36.366	mg	995483	271552
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.017	mg	465	127
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.031	mg	849	231
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.107	mg	2929	799
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.007	mg	192	52
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.003	mg	82	22
Die attach	Other Organic Materials	0.976	mg	supplier	glue	Silver (Ag)	7440-22-4		0.732	mg	750000	5466
Die attach				supplier	glue	Epoxy Cresol Novolak	Proprietary		0.24	mg	245902	1792
Die attach				supplier	glue	1-isopropyl-2,2-dimethyltrimethylene diisobut	Proprietary		0.004	mg	4098	30
Bonding wire	Other inorganic materials	0.163	mg	supplier	wire	Gold (Au)	7440-57-5		0.163	mg	1000000	1217
encapsulation	Other Organic Materials	92.628	mg	supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		9.263	mg	100002	69169
encapsulation				supplier	mold compound	phenol resin	9003-35-4		4.631	mg	49996	34581
encapsulation				supplier	mold compound	Carbon Black	1333-86-4		0.926	mg	9997	6915
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		74.102	mg	799996	553334
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		1.853	mg	20005	13837
encapsulation				JIG I	mold compound	Brominated epoxy resin	68928-70-1		1.853	mg	20005	13837