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 ***	01/15/2015
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

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
	1F39*KR05FC1	A	Z8GA	01/15/2015
	Amount	UoM	Unit type	ST ECOPACK Grade
	59.00	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 o	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOT	4.5X2.45X1.5	4	gull wing	
Comment	Package: SOT 89; MD valid for LD2981CU50TR			

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 June 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**	**1F39*KR05FC1**					
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	0.967	mg	supplier	Silicon die	Silicon	7440-21-3		0.932	mg	963806	15797
Silicon die				supplier	metallization	Aluminium (Al)	7429-90-5		0.015	mg	15512	254
Silicon die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.004	mg	4137	68
Silicon die				supplier	passivation	Silicon Oxide(SiO_2)	7631-86-9		0.008	mg	8273	136
Silicon die				supplier	passivation	Gamma-butyrolactone	96-48-0		0.006	mg	6205	102
Silicon die				supplier	passivation	Polyhydroxyamide	55295-98-2		0.002	mg	2068	34
Leadframe	Copper and its alloy	31.436	mg	Supplier	Alloy	Copper(CU)	7440-50-8		31.166	mg	991411	528237
Leadframe				Supplier	Alloy	Iron(Fe)	7439-89-6		0.159	mg	5058	2695
Leadframe				Supplier	Alloy	Iron Phosphide (Fe_2P)	1310-43-6		0.079	mg	2513	1339
Leadframe				Supplier	Alloy	Silver(Ag)	7440-22-4		0.032	mg	1018	542
Die attach	Other organic materials	0.194	mg	supplier	Glue	Silver(Ag)	7440-22-4		0.144	mg	742268	2441
Die attach				supplier	Glue	Epoxy Resin	Proprietary		0.028	mg	144330	475
Die attach				supplier	Glue	Aliphatic anhydride	Proprietary		0.014	mg	72165	237
Die attach				supplier	Glue	2-Butoxyethyl acetate	112-07-2		0.004	mg	20619	68
Die attach				supplier	Glue	Polymeric material	Proprietary		0.004	mg	20619	68
Bonding wire	Other inorganic materials	0.058	mg	supplier	Bonding wire	Gold(Au)	7440-57-5		0.058	mg	1000000	983
Encapsulation	Other organic materials	25.179	mg	supplier	Molding compound	Biphenyl epoxy resin	85954-11-6		2.487	mg	98773	42153
Encapsulation				supplier	Molding compound	Epoxy Resin	29690-82-2		1.243	mg	49367	21068
Encapsulation				supplier	Molding compound	Phenol Resin	26834-02-6		1.243	mg	49367	21068
Encapsulation				supplier	Molding compound	Silica(Amorphous) A	60676-86-0		18.403	mg	730887	311915
Encapsulation				supplier	Molding compound	Silica(Amorphous) B	7631-86-9		1.243	mg	49367	21068
Encapsulation				supplier	Molding compound	Carbon Black	1333-86-4		0.249	mg	9889	4220
Encapsulation				supplier	Molding compound	Bismuth (Bi)	7440-69-9		0.311	mg	12352	5271
Finishing-Yunan Tin	Other inorganic materials	1.166	mg	supplier	Connections coating	Tin(Sn)	7440-31-5		1.166	mg	1000000	19763