



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2014-10-29
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	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
	MFVV*NK05FC3	A	Z8GA	2014-10-29
Amount	UoM	MB61*UM85ACF	ST ECOPACK Grade	
16.00	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	
SOT	2.82X1.52X1.25	5	gull wing	
Comment	WV SOT 23 5L; MD valid for CP:LD2985BM50R.			

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	MFWV*NK05FC3					
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	0.963	mg	supplier	DIE	Silicon (Si)	7440-21-3		0.928	mg	132742	58000
SILICON DIE				supplier	METALLIZATION	Aluminium (Al)	7429-90-5		0.015	mg	2146	938
SILICON DIE				supplier	PASSIVATION	Silicon Nitride (SiN)	68034-42-4		0.004	mg	572	250
SILICON DIE				supplier	PASSIVATION	Silicon Oxide(SiO2)	7631-86-9		0.008	mg	1144	500
SILICON DIE				supplier	PASSIVATION	Gamma-butyrolactone	96-48-0		0.006	mg	858	375
SILICON DIE				supplier	PASSIVATION	Polyhydroxyamide	55295-98-2		0.002	mg	286	125
Leadframe	Copper and its alloy	6.342	mg	Supplier	Alloy	Copper(CU)	7440-50-8		6.028	mg	862251	376750
Leadframe				Supplier	Alloy	Iron(Fe)	7439-89-6		0.146	mg	311301	9125
Leadframe				Supplier	Alloy	Iron Phosphide (Fe2P)	1310-43-6		0.005	mg	10661	313
Leadframe				Supplier	Alloy	Zinc(Zn)	7440-66-6		0.008	mg	17058	313
Leadframe				Supplier	Alloy	Silver(Ag)	7440-22-4		0.155	mg	330490	500
Die Attach	Other Organic Material	0.194	mg	Supplier	Glue	Silver(Ag)	7440-22-4		0.155	mg	330490	9688
Die Attach				Supplier	Glue	Acrylate resins	NA		0.027	mg	270000	9688
Die Attach				Supplier	Glue	Heterocyclic organic compound	NA		0.006	mg	60000	1688
Die Attach				Supplier	Glue	Treated silica	NA		0.006	mg	60000	375
Bonding wire	Other Inorganic Material	0.061	mg	Supplier	Bonding wire	Gold(Au)	7440-57-5		0.061	mg	610000	375
Encapsulation	Other Organic Material	7.99	mg	Supplier	Molding compound	Fused Silica	60676-86-0		6.232	mg	1000000	3813
Encapsulation				Supplier	Molding compound	Solid Epoxy Resin	NA		0.879	mg	3544937	389500
Encapsulation				Supplier	Molding compound	Phenol Resin	NA		0.879	mg	500000	54938
Finishing	Other Inorganic Material	0.45	mg	Supplier	Connection Coating	Tin(Sn)	7440-31-5		0.45	mg	1000000	28125