



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 *	2015-09-10
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	Representative Title	IPD MD 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
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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
	HMDS*943K017	A	BO2A	2015-09-10
Amount	UoM	Unit type	ST ECOPACK Grade	
27000.00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
NAC	NAC	NAC		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Nickel (Ni)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
NAC	38 - 24 - 12	N/A	NAC	
Comment	Package: ISOTOP-DBC-R4-VIS, MD valid for CP:STTH16003TV1.			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	false
2 - 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
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	true
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
5 - Product(s) is obsolete, no information is available	false
6 - Product(s) is unknown, no information is available	false
Exemption Id.	Description
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

QueryList : REACH-15th June 2015				
Query				Response
1 - Product(s) 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	HMDS*943K017					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or Dies (choose)	Other inorganic materials	64.316	mg	supplier	die	Silicon (Si)	7440-21-3		58.396	mg	907970	2165
				supplier	metallization	Aluminium (Al)	7429-90-5		4.699	mg	73065	174
				supplier	Passivation	Silicon Oxide	7631-86-9		0.398	mg	6182	15
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.020	mg	311	1
				supplier	back side metallization	Gold (Au)	7440-57-5		0.060	mg	932	2
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.279	mg	4334	10
				supplier	polymer die coating	Durimide	proprietary		0.464	mg	7207	17
Lead-frame	Copper & its alloys	8257.674	mg	Supplier	alloy	Copper (Cu)	7440-50-8		8240.490	mg	997919	305516
				Supplier	alloy	Phosphorus (P)	12185-10-3		8.249	mg	999	306
				Supplier	metallization	Nickel (Ni)	7440-02-0		8.300	mg	1005	308
				Supplier	metallization	Phosphorus (P)	12185-10-3		0.635	mg	77	24
Soft solder	Solder	199.791	mg	JIG-R	Solder	Lead (Pb)	7439-92-1	7a-Lead in high me	186.804	mg	934998	6926
				Supplier	Solder	Silver (Ag)	7440-22-4		2.997	mg	15000	111
				Supplier	Solder	Tin (Sn)	7440-31-5		9.990	mg	50001	370
Insulator	Other inorganic materials	190.404	mg	Supplier	ceramic	Nickel (Ni)	7440-02-0		2.285	mg	11999	85
				Supplier	ceramic	Phosphorus (P)	12185-10-3		0.172	mg	902	6
				Supplier	ceramic	Manganese (Mn)	7439-96-5		7.425	mg	38998	275
				Supplier	ceramic	Titanium (Ti)	7440-32-6		0.780	mg	4098	29
				Supplier	ceramic	Molybdenum oxide	1313-27-5		9.520	mg	50000	353
				Supplier	ceramic	Alumina (Al2O3)	1344-28-1		170.222	mg	894003	6311
Screw	Other inorganic materials	7352.466	mg	Supplier	screw	iron (Fe)	7439-89-6		7352.466	mg	1000000	272593
Nut	Other inorganic materials	1060.813	mg	Supplier	nut	Nickel (Ni)	7440-02-0		1060.813	mg	1000000	39330
Bonding wire	Other inorganic materials	2.444	mg	Supplier	wire	Aluminum(Al)	7429-90-5		2.444	mg	1000000	91
Connection isotop	Other inorganic materials	4594.827	mg	Supplier	connection	Copper (Cu)	7440-50-8		4593.729	mg	999761	170312
				Supplier	connection coating	Nickel (Ni)	7440-02-0		1.030	mg	224	38
				Supplier	connection coating	Phosphorus (P)	12185-10-3		0.068	mg	15	3
Encapsulation	Other inorganic materials	5169.772	mg	Supplier	Molding compound	Silica, vitreous	60676-86-0		4497.701	mg	870000	166752
				Supplier	Molding compound	Epoxy resin	25068-38-6		516.977	mg	100000	19167
				Supplier	Molding compound	Phenol resin	29690-82-2		129.245	mg	25000	4792
				Supplier	Molding compound	Carbon Black	1333-86-4		25.849	mg	5000	958
Finishing	Other inorganic materials	107.495	mg	Supplier	connection coating	Nickel (Ni)	7440-02-0		107.495	mg	1000000	3985