



## Materials Declaration Form

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

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2014-08-05
<b>Contact Name *</b>	Refer to "Supplier Comment" section	<b>Contact Title</b>	Refer to "Supplier Comment" section
<b>Contact Phone *</b>	Refer to "Supplier Comment" section	<b>Contact Email *</b>	Refer to "Supplier Comment" section
<b>Authorized Representative *</b>	Antonella Lanzafame	<b>Representative Title</b>	AMS & IPD Materials Declaration Champion
<b>Representative Phone *</b>	Refer to "Supplier Comment" section	<b>Representative Email *</b>	Refer to "Supplier Comment" section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/internet/com/support/online_tech_support.jsp">http://www.st.com/internet/com/support/online_tech_support.jsp</a>		

**Uncertainty Statement**

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**Legal Statement**

<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	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
	BSIK*TH2240H	A	Z8GA	2014-08-05
Amount	UoM	Unit type	ST ECOPACK Grade	
310.00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
NAC	NAC	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	
SIP	6.5 - 6.1 - 2.3	3	Through-hole	
Comment	IPAK TO-251; MD valid for CP:TN22-1500H.			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	false
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)	<b>false</b>
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
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

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			<b>true</b>
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application
			ppm in product

Material Composition Declaration						Mfr Item Name	BSIK*TH2240H					
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	2.856	mg	supplier	Silicon die	Silicon (Si)	7440-21-3		2.753	mg	963936	8881
Silicon die				supplier	Alloy	Aluminium (Al)	7429-90-5		0.02	mg	7003	65
Silicon die				supplier	Alloy	Titanium (Ti)	7440-32-6		0.006	mg	2101	19
Silicon die				supplier	Alloy	Nickel (Ni)	7440-02-0		0.013	mg	4552	42
Silicon die				supplier	ALLOY	Gold (Au)	7440-57-5		0.007	mg	2451	23
Silicon die				supplier	ALLOY	Gamma-butyrolactone	96-48-0		0.019	mg	6653	61
Silicon die				supplier	ALLOY	Polyhydroxyamide	55295-98-2		0.008	mg	2801	26
Silicon die				supplier	ALLOY	Alcoxysilane	proprietary		0.001	mg	350	3
Silicon die				supplier	COATING	Titanium (Ti)	7440-32-6		0.002	mg	700	6
Silicon die				supplier	GLUE	Gold (Au)	7440-57-5		0.005	mg	1751	16
Silicon die				supplier	GLUE	Nickel (Ni)	7440-02-0		0.022	mg	7703	71
Leadframe	Copper and its alloy	149.274	mg	Supplier	Alloy	Copper(CU)	7440-50-8		148.964	mg	997923	480529
Leadframe				Supplier	Alloy	Iron(Fe)	7439-89-6		0.149	mg	998	481
Leadframe				Supplier	Alloy	Iron Phosphide (FeP)	26508-33-8		0.045	mg	301	145
Leadframe				Supplier	Alloy	Nickel	7440-02-0		0.116	mg	777	374
Die Attach	Other Organic Material	1.478	mg	Supplier	Soft Solder	Tin(Sn)	7440-31-5		0.003	mg	2030	10
Die Attach				Supplier	Soft Solder	Silver(Ag)	7440-22-4	7a-Lead in high me	0.038	mg	25710	123
Die Attach				Supplier	Soft Solder	Lead	7439-92-1		1.437	mg	972260	4635
Bonding wire	Other Inorganic Material	0.968	mg	Supplier	Bonding wire	Aluminum(Al)	84195-93-7		0.968	mg	1000000	3123
Encapsulation	Other Organic Material	150.589	mg	Supplier	Molding compound	Silica Fused	60676-86-0		120.472	mg	800005	388619
Encapsulation				Supplier	Molding compound	Epoxy Resin	proprietary		15.059	mg	100001	48577
Encapsulation				Supplier	Molding compound	Phenol Resin	proprietary		9.788	mg	64998	31574
Encapsulation				Supplier	Molding compound	Carbon Black	14808-60-7		5.27	mg	34996	17000
Finishing	Other Inorganic Material	4.835	mg	Supplier	Connection Coating	Tin(Sn)	7440-31-5		4.835	mg	1000000	15597