



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 *	2015-05-11
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
STB270N4F3(1310)	X4D2*4D4KE52	A	SHENZHEN B/E	2015-05-11
	Amount	UoM	Unit type	ST ECOPACK Grade
	1380.00	mg	Each	ECOPACK1

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
1	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	10.2, 9.15, 4.5	2	GULL WING	
Comment	Package: D2 PACK	MD valid for CP:STB270N4F3(1310)		

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)

ELV exemption number	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	false
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	true
Exemption Id.	Description

QueryList : REACH-17th December 2014				
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	X4D2*4D4KE52									
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	15.585	mg	supplier	die	Silicon (Si)	7440-21-3		14.948	mg	959192	10833				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.383	mg	24575	278				
				supplier	metallization	Tungsten (W)	7440-33-7		0.006	mg	385	4				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.090	mg	5775	65				
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.009	mg	577	7				
				supplier	back side metallization	Gold (Au)	7440-57-5		0.028	mg	1797	20				
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.112	mg	7186	81				
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.008	mg	513	6				
				Leadframe	Copper & its alloys	779.567	mg	supplier	alloy	Copper (Cu)	7440-50-8		777.537	mg	997396	563433
								supplier	alloy	Iron (Fe)	7439-89-6		0.358	mg	459	259
supplier	alloy	Iron Phosphide (FeP)	26508-33-8						0.654	mg	839	474				
supplier	metallization	Nickel (Ni)	7440-02-0						1.012	mg	1298	733				
supplier	metallization	Phosphorus (P)	12185-10-3						0.006	mg	8	4				
Soft solder	Solder	17.312	mg					JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	16.533	mg	955002	11980
				supplier	solder	Silver (Ag)	7440-22-4		0.433	mg	25012	314				
				supplier	solder	Tin (Sn)	7440-31-5		0.346	mg	19986	251				
Bonding wires	Other inorganic materials	0.671	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.670	mg	998510	486				
				supplier	wire	Magnesium (Mg)	7439-95-4		0.001	mg	1490	1				
Encapsulation	Other Organic Materials	564.377	mg	supplier	mold compound	Silica, vitreous	60676-86-0		454.887	mg	805998	329628				
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		39.506	mg	69999	28628				
				supplier	mold compound	Phenol resin	9003-35-4		22.575	mg	40000	16359				
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		33.863	mg	60001	24538				
				supplier	mold compound	Antimony Trioxide	1309-64-4		6.773	mg	12001	4908				
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		3.951	mg	7001	2863				
				supplier	mold compound	Carbon black	1333-86-4		2.822	mg	5000	2045				
connections coating	Solder	2.489	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.489	mg	1000000	1804				