



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 *	2015-07-15
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
STB43N65M5	X2D2*M5FLA52	A	SHENZHEN B/E	2015-07-15
	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 D2PAK, MD valid for CP:STB43N65M5			

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-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	X2D2*M5FLA52					
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	23.225	mg	supplier	die	Silicon (Si)	7440-21-3		22.701	mg	977439	16451
				supplier	metallization	Aluminium (Al)	7429-90-5		0.211	mg	9085	153
				supplier	Passivation	Silicon Oxide	7631-86-9		0.092	mg	3961	67
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.011	mg	474	8
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.155	mg	6674	112
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.055	mg	2368	40
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
				supplier	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	19.822	mg	955001
Soft solder	Solder	20.756	mg	supplier	solder	Silver (Ag)	7440-22-4		0.519	mg	25005	376
				supplier	solder	Tin (Sn)	7440-31-5		0.415	mg	19994	301
Bonding wires	Other inorganic materials	0.424	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.423	mg	997642	307
				supplier	wire	Magnesium (Mg)	7439-95-4		0.001	mg	2358	1
Encapsulation	Other Organic Materials	553.539	mg	supplier	mold compound	Silica, vitreous	60676-86-0		446.152	mg	805999	323299
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		38.748	mg	70000	28078
				supplier	mold compound	Phenol resin	9003-35-4		22.142	mg	40001	16045
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		33.212	mg	59999	24067
				supplier	mold compound	Antimony Trioxide	1309-64-4		6.642	mg	11999	4813
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		3.875	mg	7000	2808
Connections coating	Solder	2.489	mg	supplier	mold compound	Carbon black	1333-86-4		2.768	mg	5001	2006
				supplier	solder alloy	Tin (Sn)	7440-31-5		2.489	mg	1000000	1804