



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 *	2015-07-09
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

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
	XLD2*FQ6LA62	A	SHENZHEN B/E	2015-07-09
Amount	UoM	Unit type	ST ECOPACK Grade	
1380	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: D2PAK, MD valid for CP: STB45N60DM2AG			

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	XLD2*FQ6LA62					
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	45.910	mg	supplier	die	Silicon (Si)	7440-21-3		44.267	mg	964212	32077
				supplier	metallization	Aluminium (Al)	7429-90-5		0.896	mg	19517	649
				supplier	Passivation	Silicon Nitride	12033-89-5		0.212	mg	4618	154
				supplier	Passivation	Silicon Oxide	7631-86-9		0.316	mg	6883	229
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.011	mg	240	8
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.154	mg	3354	112
Leadframe	Copper & its alloys	779.567	mg	supplier	back side metallization	Silver (Ag)	7440-22-4		0.054	mg	1176	39
				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
Soft solder	Solder	20.592	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	19.665	mg	954983	14250
				supplier	solder	Silver (Ag)	7440-22-4		0.515	mg	25010	373
				supplier	solder	Tin (Sn)	7440-31-5		0.412	mg	20008	299
				supplier	wire	Aluminium (Al)	7429-90-5		0.423	mg	997642	307
Bonding wires	Other inorganic materials	0.424	mg	supplier	wire	Magnesium (Mg)	7439-95-4		0.001	mg	2358	1
				supplier	wire							
Encapsulation	Other Organic Materials	531.018	mg	supplier	mold compound	Silica, vitreous	60676-86-0		428.001	mg	806001	310146
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		37.171	mg	70000	26936
				supplier	mold compound	Phenol resin	9003-35-4		21.241	mg	40001	15392
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		31.861	mg	60000	23088
				supplier	mold compound	Antimony Trioxide	1309-64-4		6.372	mg	12000	4617
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		3.717	mg	7000	2693
				supplier	mold compound	Carbon black	1333-86-4		2.655	mg	5000	1924
Connections coating	Solder	2.489	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.489	mg	1000000	1804