



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 *	2015-07-22
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		

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Legal Statement			
Supplier Acceptance *	true	Legal Declaration *	Standard
Legal Statement	<p>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.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STGF14NC60KD	XDFP*KV64662	A	SHENZHEN B/E	2015-07-22
	Amount	UoM	Unit type	ST ECOPACK Grade
	1900.00	mg	Each	ECOPACK2

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	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	10, 9.05, 4.4	3	THROUGH HOLE	
Comment	Package: TO 220 ISO FULL PACK IN LINE			

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	XDFP*KV64662					
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	12.589	mg	supplier	die	Silicon (Si)	7440-21-3		12.289	mg	976172	6468
				supplier	metallization	Aluminium (Al)	7429-90-5		0.150	mg	11914	79
				supplier	Passivation	Silicon Nitride	12033-89-5		0.031	mg	2462	16
				supplier	Passivation	Silicon Oxide	7631-86-9		0.044	mg	3495	23
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	79	1
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.004	mg	318	2
				supplier	back side metallization	Gold (Au)	7440-57-5		0.003	mg	238	2
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.055	mg	4369	29
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.012	mg	953	6
Leadframe	Copper & Its alloys	1257.964	mg	supplier	alloy	Copper (Cu)	7440-50-8		1251.376	mg	994763	658619
				supplier	alloy	Iron (Fe)	7439-89-6		1.253	mg	996	659
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.376	mg	299	198
				supplier	metallization	Nickel (Ni)	7440-02-0		4.928	mg	3917	2594
				supplier	metallization	Phosphorus (P)	12185-10-3		0.031	mg	25	16
Soft solder	Solder	6.503	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	6.210	mg	954944	3268
				supplier	solder	Silver (Ag)	7440-22-4		0.163	mg	25065	86
				supplier	solder	Tin (Sn)	7440-31-5		0.130	mg	19991	68
Bonding wires	Other inorganic materials	1.410	mg	supplier	wire	Aluminium (Al)	7429-90-5		1.409	mg	999291	742
				supplier	wire	Magnesium (Mg)	7439-95-4		0.001	mg	709	1
				supplier	mold compound	Quartz	14808-60-7		430.620	mg	699999	226642
				supplier	mold compound	Silica, vitreous	60676-86-0		46.138	mg	75000	24283
				supplier	mold compound	Epoxy resin	25068-38-6		86.124	mg	140000	45328
Encapsulation	Other Organic Materials	615.172	mg	supplier	mold compound	phenol resin	29690-82-2		43.062	mg	70000	22664
				supplier	mold compound	metal hydroxide	Proprietary		6.152	mg	10000	3238
				supplier	mold compound	carbon black	1333-86-4		3.076	mg	5000	1619
				supplier	solder alloy	Tin (Sn)	7440-31-5		6.362	mg	1000000	3348