



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 *	2016-07-13
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	Representative Title	ADG 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
STP315N10F7	X3DZ*OD0KA52	A	SHENZHEN B/E	2016-07-13
	Amount	UoM	Unit type	ST ECOPACK Grade
	1900.00	mg	Each	ECOPACK1

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	10-9.1-4.5	3	THROUGH HOLE	
Comment	TO 220 AB NON ISOL			

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-20th June 2016				
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	X3DZ*OD0KA52					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	19.663	mg	supplier	die	Silicon (Si)	7440-21-3		19.028	mg	967704	10014
				supplier	metallization	Aluminium (Al)	7429-90-5		0.177	mg	9002	93
				supplier	metallization	Titanium (Ti)	7440-32-6		0.034	mg	1728	18
				supplier	Passivation	Silicon Nitride	12033-89-5		0.039	mg	1984	21
				supplier	Passivation	Silicon Oxide	7631-86-9		0.202	mg	10274	106
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.010	mg	509	5
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.136	mg	6917	72
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.007	mg	356	4
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.030	mg	1526	16
				supplier	alloy	Copper (Cu)	7440-50-8		1251.376	mg	993587	658619
Leadframe	Copper & its alloys	1259.453	mg	supplier	alloy	Iron (Fe)	7439-89-6		1.253	mg	995	659
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.376	mg	299	198
				supplier	metallization	Nickel (Ni)	7440-02-0		6.408	mg	5087	3375
				supplier	metallization	Phosphorus (P)	12185-10-3		0.040	mg	32	21
				supplier	alloy	Lead (Pb)	7439-92-1	7a-Lead in high met	16.709	mg	955018	8794
Soft solder	Solder	17.496	mg	JIG - R	solder	Silver (Ag)	7440-22-4		0.437	mg	24977	230
				supplier	solder	Tin (Sn)	7440-31-5		0.350	mg	20005	184
				supplier	wire	Aluminium (Al)	7429-90-5		7.205	mg	999903	3792
Bonding wires	Other inorganic materials	7.206	mg	supplier	wire	Magnesium (Mg)	7439-95-4		0.001	mg	97	0
				supplier	mold compound	Silica vitreous	60676-86-0		460.060	mg	780001	242137
Encapsulation	Other Organic Materials	589.820	mg	supplier	mold compound	Bisphenol F type epoxy resin	9003-36-5		56.033	mg	95000	29491
				supplier	mold compound	Phenol resin	9003-35-4		49.545	mg	84000	26076
				supplier	mold compound	Antimony Trioxide	1309-64-4		10.027	mg	17000	5277
				supplier	mold compound	Brominated flame retardant	Proprietary		8.847	mg	14999	4656
				supplier	mold compound	Silica Cristobalite	14464-46-1		2.949	mg	5000	1552
				supplier	mold compound	Carbon Black	1333-86-4		2.359	mg	4000	1242
Connections coating	Solder	6.362	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.362	mg	1000000	3348