



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 *	2017-04-20
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		

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
STP141NF55	X2DZ*MM5JA61	A	BOUSKOURA B/E	2017-04-20
Amount		UoM	Unit type	ST ECOPACK Grade
1919.00		mg	Each	ECOPACK1

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
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 – Annex II amended by Directive 2015/863-April 2015	
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-12th January 2017				
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	X2DZ*MMSJA61					
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	17.684	mg	supplier	die	Silicon (Si)	7440-21-3		17.023	mg	962622	8871
				supplier	metallization	Aluminium (Al)	7429-90-5		0.331	mg	18717	172
				supplier	Passivation	Silicon Nitride	12033-89-5		0.073	mg	4128	38
				supplier	Passivation	Silicon Oxide	7631-86-9		0.092	mg	5202	48
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.008	mg	453	4
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.116	mg	6560	60
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.041	mg	2318	21
Leadframe	Copper & its alloys	1253.179	mg	supplier	alloy	Copper (Cu)	7440-50-8		1251.376	mg	998561	652098
				supplier	alloy	Iron (Fe)	7439-89-6		1.253	mg	1000	653
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.376	mg	300	196
				supplier	metallization	Nickel (Ni)	7440-02-0		0.173	mg	138	90
				supplier	metallization	Phosphorus (P)	12185-10-3		0.001	mg	1	1
Soft solder	Solder	15.705	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	14.998	mg	954982	7816
				supplier	solder	Silver (Ag)	7440-22-4		0.393	mg	25024	204
				supplier	solder	Tin (Sn)	7440-31-5		0.314	mg	19994	164
Bonding wires	Other inorganic materials	9.177	mg	supplier	wire	Aluminium (Al)	7429-90-5		9.176	mg	999891	4782
				supplier	wire	Magnesium (Mg)	7439-95-4		0.001	mg	109	1
Encapsulation	Other Organic Materials	616.893	mg	supplier	mold compound	Silica vitreous	60676-86-0		481.177	mg	780001	250744
				supplier	mold compound	Bisphenol F type epoxy resin	9003-36-5		58.605	mg	95000	30539
				supplier	mold compound	Phenol resin	9003-35-4		51.819	mg	84000	27003
				supplier	mold compound	Antimony Trioxide	1309-64-4		10.487	mg	17000	5465
				supplier	mold compound	Brominated flame retardant	Proprietary		9.253	mg	14999	4822
				supplier	mold compound	Silica Cristobalite	14464-46-1		3.084	mg	4999	1607
connections coating	Solder	6.362	mg	supplier	mold compound	Carbon Black	1333-86-4		2.468	mg	4001	1286
				supplier	solder alloy	Tin (Sn)	7440-31-5		6.362	mg	1000000	3315