



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 *	2016-01-14
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
L78M15ABV-DG	MZ80*L965AA6	A	SHENZHEN B/E	2016-01-14
	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	10.2, 9.1, 4.5	3	THROUGH HOLE	
Comment	TO 220 CU Wire on CU			

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 2015				
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	MZ80*L965AA6					
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	1.927	mg	supplier	die	Silicon (Si)	7440-21-3		1.866	mg	968361	983
				supplier	metallization	Aluminium (Al)	7429-90-5		0.024	mg	12448	13
				supplier	Passivation	Silicon Nitride	12033-89-5		0.008	mg	4149	4
				supplier	Passivation	Silicon Oxide	7631-86-9		0.011	mg	5705	6
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.001	mg	519	1
				supplier	back side metallization	Gold (Au)	7440-57-5		0.004	mg	2075	2
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.013	mg	6743	7
Leadframe	Copper & its alloys	1253.004	mg	supplier	alloy	Copper (Cu)	7440-50-8		1251.375	mg	998700	658618
				supplier	alloy	Iron (Fe)	7439-89-6		1.253	mg	1000	659
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.376	mg	300	198
Soft solder	Solder	1.992	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	1.902	mg	954819	1001
				supplier	solder	Silver (Ag)	7440-22-4		0.050	mg	25100	26
				supplier	solder	Tin (Sn)	7440-31-5		0.040	mg	20080	21
Bonding wires	Other inorganic materials	0.201	mg	supplier	wire	Copper (Cu)	7440-50-8		0.201	mg	1000000	106
				supplier	Other Organic Materials	636.514	mg	supplier	mold compound	Silica, vitreous	60676-86-0	
Encapsulation	Other Organic Materials	636.514	mg	supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		98.660	mg	155001	51926
				supplier	mold compound	Phenol resin	9003-35-4		35.008	mg	55000	18425
				supplier	mold compound	Antimony Trioxide	1309-64-4		12.730	mg	20000	6700
				supplier	mold compound	Brominated Epoxy Resin	68928-70-1		3.183	mg	5001	1675
				supplier	mold compound	Quartz	14808-60-7		3.183	mg	5001	1675
				supplier	mold compound	Carbon Black	1333-86-4		3.183	mg	5001	1675
				supplier	solder alloy	Tin (Sn)	7440-31-5		6.362	mg	1000000	3348