



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 *	2016-03-30
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
L78M08CV-DG	MZ80*LM08AB6	A	SHENZHEN B/E	2016-03-30
	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	M280*LM08AB6					
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	1.264	mg	supplier	die	Silicon (Si)	7440-21-3		1.229	mg	972332	647
				supplier	metallization	Aluminium (Al)	7429-90-5		0.008	mg	6322	4
				supplier	Passivation	Silicon Nitride	12033-89-5		0.007	mg	5534	4
				supplier	Passivation	Silicon Oxide	7631-86-9		0.007	mg	5534	4
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.001	mg	791	1
				supplier	back side metallization	Gold (Au)	7440-57-5		0.003	mg	2372	2
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.009	mg	7115	5
				supplier	alloy	Copper (Cu)	7440-50-8		1251.375	mg	998700	658618
Leadframe	Copper & its alloys	1253.004	mg	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
				JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	1.306	mg	955377	687
Soft solder	Solder	1.367	mg	supplier	solder	Silver (Ag)	7440-22-4		0.034	mg	24872	18
				supplier	solder	Tin (Sn)	7440-31-5		0.027	mg	19751	14
Bonding wires	Other inorganic materials	0.254	mg	supplier	wire	Copper (Cu)	7440-50-8		0.254	mg	1000000	134
Encapsulation	Other Organic Materials	637.749	mg	supplier	mold compound	Silica, vitreous	60676-86-0		481.500	mg	754999	253421
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		98.851	mg	155001	52027
				supplier	mold compound	Phenol resin	9003-35-4		35.076	mg	55000	18461
				supplier	mold compound	Antimony Trioxide	1309-64-4		12.755	mg	20000	6713
				supplier	mold compound	Brominated Epoxy Resin	68928-70-1		3.189	mg	5000	1678
				supplier	mold compound	Quartz	14808-60-7		3.189	mg	5000	1678
				supplier	mold compound	Carbon Black	1333-86-4		3.189	mg	5000	1678
Connections coating	Solder	6.362	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.362	mg	1000000	3348