



## Materials Declaration Form

<b>IPC Form Type *</b>	1752 Distribute	<b>Version</b>	2
<b>Sectionals *</b>	Material Info Manufacturing Info	<b>Subsectionals *</b>	A-D
<i>* : Required Field</i>			

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2017-03-01
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Antonella Lanzafame	<b>Representative Title</b>	AMG MD Champion
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

Uncertainty Statement			
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Legal Statement			
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	Standard
<b>Legal Statement</b>	<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
L78M09CDT-TR	HZGR*LM09AA6	A	SHENZHEN B/E	2017-03-01
Amount		UoM	Unit type	ST ECOPACK Grade
331.30		mg	Each	ECOPACK2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
SIP	6.085-6.61-2.3	3	GULL WING	
Comment	TO-252 DPAK Cu Wire			

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	HZGR*LM09AA6					
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	1.928	mg	supplier	die	Silicon (Si)	7440-21-3		1.867	mg	968361	5635
				supplier	metallization	Aluminium (Al)	7429-90-5		0.024	mg	12448	72
				supplier	Passivation	Silicon Nitride	12033-89-5		0.008	mg	4149	24
				supplier	Passivation	Silicon Oxide	7631-86-9		0.011	mg	5705	33
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.001	mg	519	3
				supplier	back side metallization	Gold (Au)	7440-57-5		0.004	mg	2075	12
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.013	mg	6743	39
Leadframe	Copper & its alloys	183.855	mg	supplier	alloy	Copper (Cu)	7440-50-8		183.616	mg	998700	554229
				supplier	alloy	Iron (Fe)	7439-89-6		0.085	mg	462	257
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.154	mg	838	465
Soft solder	Solder	1.992	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	1.902	mg	954819	5741
				supplier	solder	Silver (Ag)	7440-22-4		0.050	mg	25100	151
				supplier	solder	Tin (Sn)	7440-31-5		0.040	mg	20080	121
Bonding wires	Other inorganic materials	0.107	mg	supplier	wire	Copper (Cu)	7440-50-8		0.107	mg	1000000	323
				supplier	wire	Copper (Cu)	7440-50-8		0.107	mg	1000000	323
Encapsulation	Other Organic Materials	142.373	mg	supplier	mold compound	Silica, vitreous	60676-86-0		124.576	mg	874997	376022
				supplier	mold compound	Tetramethyl-biphenyl-diyl-bis oxymethylene-b	EC 413-900-7		5.695	mg	40001	17190
				supplier	mold compound	Epoxy Resin	25068-38-6		4.271	mg	29999	12892
				supplier	mold compound	phenol resin	29690-82-2		7.119	mg	50002	21488
				supplier	mold compound	Carbon black	1333-86-4		0.712	mg	5001	2149
Connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3154