



## 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  * : Required Field

<b>Supplier Information</b>			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2016-09-19
<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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<b>Legal Statement</b>			
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	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
LD29150DT33R	HZGR*NB33FC2	A	SHENZHEN B/E	2016-09-19
Amount	UoM	Unit type	ST ECOPACK Grade	
331.3	mg	Each	ECOPACK2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
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	MD valid for CP:LD29150DT33R			

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)

ELV exemption number	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	false
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	true
Exemption Id.	Description

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	HZGR*NB33FC2					
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	3.306	mg	supplier	die	Silicon (Si)	7440-21-3		3.184	mg	963097	9611
				supplier	metallization	Aluminum (Al)	7429-90-5		0.050	mg	15124	151
				supplier	Passivation	Silicon Nitride	12033-89-5		0.014	mg	4235	42
				supplier	Passivation	Silicon Oxide	7631-86-9		0.026	mg	7864	78
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.003	mg	907	9
				supplier	back side metallization	Gold (Au)	7440-57-5		0.007	mg	2117	21
Leadframe	Copper & its alloys	183.855	mg	supplier	back side metallization	Nickel (Ni)	7440-02-0		0.022	mg	6655	66
				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	3.253	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	3.107	mg	955118	9378
				supplier	solder	Silver (Ag)	7440-22-4		0.081	mg	24900	244
				supplier	solder	Tin (Sn)	7440-31-5		0.065	mg	19982	196
Bonding wires	Other inorganic materials	0.471	mg	supplier	wire	Copper (Cu)	7440-50-8		0.471	mg	1000000	1422
				supplier	mold compound	Silica, vitreous	60676-86-0		121.949	mg	874996	368092
Encapsulation	Other Organic Materials	139.371	mg	supplier	mold compound	Tetramethyl-biphenyl-diy-bis oxymethylene-bi	EC 413-900-7		5.575	mg	40001	16828
				supplier	mold compound	Epoxy Resin	25068-38-6		4.181	mg	29999	12620
				supplier	mold compound	phenol resin	9003-35-4		6.969	mg	50003	21035
				supplier	mold compound	Carbon black	1333-86-4		0.697	mg	5001	2104
connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3154