



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 *	2016-04-01
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		

Uncertainty Statement

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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
LD29080DT33R	HZGR*NG33FC2	A	SHENZHEN B/E	2016-04-01
Amount		UoM	Unit type	ST ECOPACK Grade
290.00		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	
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	HZGR*NG33FC2					
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	2.380	mg	supplier	die	Silicon (Si)	7440-21-3		2.263	mg	950840	7803
				supplier	metallization	Aluminium (Al)	7429-90-5		0.035	mg	14706	121
				supplier	Passivation	Silicon Nitride	12033-89-5		0.010	mg	4202	34
				supplier	Passivation	Silicon Oxide	7631-86-9		0.019	mg	7983	66
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.002	mg	840	7
				supplier	back side metallization	Gold (Au)	7440-57-5		0.005	mg	2101	17
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.016	mg	6723	55
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.030	mg	12605	103
Leadframe	Copper & its alloys	183.855	mg	supplier	alloy	Copper (Cu)	7440-50-8		183.616	mg	998700	633159
				supplier	alloy	Iron (Fe)	7439-89-6		0.085	mg	462	293
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.154	mg	838	531
Soft solder	Solder	2.377	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	2.270	mg	954985	7828
				supplier	solder	Silver (Ag)	7440-22-4		0.059	mg	24821	203
				supplier	solder	Tin (Sn)	7440-31-5		0.048	mg	20194	166
Bonding wires	Other inorganic materials	0.254	mg	supplier	wire	Copper (Cu)	7440-50-8		0.254	mg	1000000	876
				supplier	mold compound	Silica, vitreous	60676-86-0		87.578	mg	875001	301993
Encapsulation	Other Organic Materials	100.089	mg	supplier	mold compound	Tetramethyl-biphenyl-diyl-bis oxymethylene-b	EC 413-900-7		4.004	mg	40004	13807
				supplier	mold compound	Epoxy Resin	25068-38-6		3.003	mg	30003	10355
				supplier	mold compound	phenol resin	29690-82-2		5.004	mg	49996	17255
				supplier	mold compound	Carbon black	1333-86-4		0.500	mg	4996	1724
Connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3603