



## Materials Declaration Form

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

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2016-05-27</b>
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	<b>Floriana San Biagio</b>	<b>Representative Title</b>	<b>AMG MD CHAMPION</b>
<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>	<b>true</b>	<b>Legal Declaration *</b>	<b>Standard</b>
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**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
	1F39*LB05FC2	A	Z8GA	2016-05-27
Amount	UoM	Unit type	ST ECOPACK Grade	
59.00	mg	Each	ECOPACK® 2	
	Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant ( in each organic material)		

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, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOT	4.5x2.45x1.5	4	gull wing	
Comment	Package: 39 SOT 89; MDF valid for L79L05ABUTR			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	true
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)	false
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Exemption Id.	Description

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	1F39*LB05FC2						
note : Substance present with less 0.001mg will not be declared in this document													
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	0.904	mg	supplier	die	Silicon (Si)	7440-21-3		0.883	mg	976770	14966	
				supplier	metallization	Aluminium (Al)	7429-90-5		0.011	mg	12168	186	
				supplier	Passivation	Silicon Nitride	12033-89-5		0.004	mg	4425	68	
				supplier	Passivation	Silicon Oxide	7631-86-9		0.006	mg	6637	102	
Leadframe	Copper & its alloys	31.770	mg	supplier	alloy	Copper (Cu)	7440-50-8		31.538	mg	992698	534542	
				supplier	alloy	Iron (Fe)	7439-89-6		0.032	mg	1007	542	
				supplier	alloy	Phosphorus (P)	12185-10-3		0.010	mg	315	169	
				supplier	metallization	Silver (Ag)	7440-22-4		0.190	mg	5980	3220	
Die attach	Other Organic Materials	0.235	mg	supplier	glue	Silver(Ag)	7440-22-4		0.148	mg	629787	2508	
				supplier	glue	Epoxy Resin	proprietary		0.030	mg	127660	508	
				supplier	glue	Aliphatic anhydride	proprietary		0.014	mg	59574	237	
				supplier	glue	2-Butoxyethyl acetate	112-07-2		0.039	mg	165957	661	
				supplier	glue	Polymeric material	proprietary		0.004	mg	17021	68	
				supplier	wire	Gold (Au)	7440-57-5		0.048	mg	1000000	814	
				supplier	Other Organic Materials	24.877	mg	supplier	Other Organic Materials	24.877	mg	881979	371881
				supplier	Other Organic Materials	24.877	mg	supplier	Other Organic Materials	24.877	mg	881979	371881
Encapsulation	Other Organic Materials	24.877	mg	supplier	Other Organic Materials	24.877	mg	881979	371881				
				supplier	Other Organic Materials	24.877	mg	881979	371881				
				supplier	Other Organic Materials	24.877	mg	881979	371881				
				supplier	Other Organic Materials	24.877	mg	881979	371881				
connections coating	Solder	1.166	mg	supplier	Other Organic Materials	24.877	mg	881979	371881				
				supplier	Other Organic Materials	24.877	mg	881979	371881				
				supplier	Other Organic Materials	24.877	mg	881979	371881				
				supplier	Other Organic Materials	24.877	mg	881979	371881				
connections coating	Solder	1.166	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.166	mg	1000000	19763	