



## 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*

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	01/26/2015
<b>Contact Name *</b>	Refer to "Supplier Comment" section	<b>Contact Title</b>	Refer to "Supplier Comment" section
<b>Contact Phone *</b>	Refer to "Supplier Comment" section	<b>Contact Email *</b>	Refer to "Supplier Comment" section
<b>Authorized Representative *</b>	Giuseppe Vitali Palma	<b>Representative Title</b>	AMS & IPD Materials Declaration 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/internet/com/support/online_tech_support.jsp">http://www.st.com/internet/com/support/online_tech_support.jsp</a>		

**Uncertainty Statement**

While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.


**Legal Statement**

<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
	MZW8*G6LAB20	A	Z7GA	01/26/2015
Amount	UoM	Unit type	ST ECOPACK Grade	
5.40	mg	Each	ECOPACK® 2	

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
Not Applicable ; if coating is used o	Tin (Sn), matte	Copper Alloy			

Package Designator	Size	Nbr of instances	Shape	
SOT	2X1.26X0.93	3	gull wing	
Comment	Package: SOT 323 5LDS; MD valid for STLM20W87F			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	<b>true</b>
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
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
Product(s) is unknown, no information is available	false
Exemption Id.	Description

QueryList : REACH-16th June 2014				
Query				Response
The product does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				<b>true</b>
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration						Mfr Item Name	MZW8*G6LAB20					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Silicon Die	Other Inorganic Material	0.457	mg	Supplier	Silicon Die	Silicon (Si)	7440-21-3		0.454	mg	993435	84074
Silicon Die			mg	supplier	metallization	Aluminium (Al)	7429-90-5		0.001	mg	2188	185
Silicon Die			mg	supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.002	mg	4376	370
Leadframe	Copper and its alloy	1.159	mg	Supplier	Alloy	Copper	7440-50-8		1.119	mg	965487	207222
Leadframe			mg	Supplier	Alloy	Iron	7439-89-6		0.037	mg	31924	6852
Leadframe			mg	Supplier	Alloy	Iron phosphide (Fe2P)	1310-43-6		0.001	mg	863	185
Leadframe			mg	Supplier	Alloy	Zinc	7440-66-6		0.002	mg	1726	370
Die Attach	Other Organic Material	0.058	mg	Supplier	Glue	Silver	7440-22-4		0.048	mg	827586	8889
Die Attach			mg	Supplier	Glue	Reaction product: bisphenol-F-(epichlorhydrin	8003-36-5		0.006	mg	103448	1111
Die Attach			mg	Supplier	Glue	1,4-Bis(2,3-epoxypropoxy)butane	2425-79-8		0.002	mg	34483	370
Die Attach			mg	Supplier	Glue	Aromatic amine	Proprietary		0.002	mg	34483	370
Bonding Wire	Other Inorganic Material	0.02	mg	Supplier	Bonding Wire	Au	7440-57-5		0.02	mg	1000000	3704
Encapsulation	Other Organic Material	3.593	mg	Supplier	Molding Compound	phenolic resin	Proprietary		0.123	mg	34233	22778
Encapsulation			mg	Supplier	Molding Compound	epoxy resin	Proprietary		0.123	mg	34233	22778
Encapsulation			mg	Supplier	Molding Compound	Biphenyl epoxy resin	85954-11-6		0.184	mg	51211	34074
Encapsulation			mg	Supplier	Molding Compound	Silica	60676-86-0		3.008	mg	837183	557037
Encapsulation			mg	Supplier	Molding Compound	Carbon Black	1333-86-4		0.008	mg	2227	1481
Encapsulation			mg	Supplier	Molding Compound	Zinc hydroxide	20427-58-1		0.03	mg	8350	5556
Encapsulation			mg	Supplier	Molding Compound	Magnesium hydroxide	1309-42-8		0.117	mg	32563	21667
Finishing	Other inorganic materials	0.113	mg	supplier	Connection coating	Sn	Proprietary		0.113	mg	1000000	20926