



## 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>

<b>Supplier Information</b>			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2015-04-09
<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>	Giovanni Giacobello	<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.

<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
	SMJU*UA01AB4	A	Z89A	2015-04-09
Amount	UoM	Unit type	ST ECOPACK Grade	
112.00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used c	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	7X7X0.9	88	No lead	
Comment	Package: VQFN-mr 7x7x0.9 EP 4.6x4.6 88; MDF valid for 100559770			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	true
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-17th December 2014				
Query				Response
The product 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	SMJU*UA01AB4						
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 materials	10.236	mg	supplier	die	Silicon (Si)	7440-21-3		9.75	mg	952521	87054	
Silicon die				supplier	metallization	Aluminium (Al)	7429-90-5		0.1	mg	9769	893	
Silicon die				supplier	passivation	Silicon Nitride (SiN)	12033-89-5		0.021	mg	2052	188	
Silicon die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.171	mg	16706	1527	
Silicon die				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.008	mg	782	71	
Silicon die				supplier	back side metallization	Gold (Au)	7440-57-5		0.02	mg	1954	179	
Silicon die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.057	mg	5569	509	
Silicon die				supplier	back side metallization	Vanadium (V)	7440-62-2		0.004	mg	391	36	
Silicon die				supplier	polymer die coating	PIX1 Gamma-butylolactone	96-48-0		0.105	mg	10258	938	
Lead frame	Other inorganic materials	41.116	mg	supplier	Alloy	Copper (Cu)	7440-50-8		39.913	mg	970741	356366	
Lead frame				supplier	Alloy	Iron (Fe)	7439-89-6		0.985	mg	23957	8795	
Lead frame				supplier	Alloy	Zinc (Zn)	7440-66-6		0.052	mg	1265	464	
Lead frame				supplier	Alloy	Iron Phosphide(FeP)	26508-33-8		0.035	mg	851	313	
Lead frame				supplier	Metallization	Silver (Ag)	7440-22-4		0.131	mg	3186	1170	
Die Attach	Other organic materials	0.923	mg	supplier	glue	Silver (Ag)	7440-22-4		0.789	mg	854821	7045	
Die Attach				supplier	glue	Isobornyl metacrylate	7534-94-3		0.074	mg	80173	661	
Die Attach				supplier	glue	Bismalimide resin	Proprietary		0.06	mg	65005	536	
Bonding Wire	Other inorganic materials	0.865	mg	supplier	Wire	Gold (Au)	7440-57-5		0.865	mg	1000000	7723	
Encapsulation	Other organic materials	56.576	mg	supplier	Molding compound	Silica	60676-86-0		47.643	mg	842106	425384	
Encapsulation				supplier	Molding compound	Phenol Resin	205830-20-2		1.76	mg	31109	15714	
Encapsulation				supplier	Molding compound	Biphenyl epoxy resin	85954-11-6		1.624	mg	28705	14500	
Encapsulation				supplier	Molding compound	epoxy resin	Proprietary		0.569	mg	10057	5080	
Encapsulation				supplier	Molding compound	Carbon black	1333-86-4		0.054	mg	954	482	
Encapsulation				supplier	Molding compound	Hardener	Proprietary		2.436	mg	43057	21750	
Encapsulation				supplier	Molding compound	Carbon black	1333-86-4		0.054	mg	954	482	
Encapsulation				supplier	Molding compound	Hardener	Proprietary		2.436	mg	43057	21750	
connections coating	Solder	2.284	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.284	mg	1000000	20393	