



## 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>Subsectionals *</b>	A-D <i>* : Required Field</i>

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2014-11-19</b>
<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 Giacopello	<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/web/en/support/online_tech_support.html">http://www.st.com/web/en/support/online_tech_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
	SHM4*MQ6DB62	A	SH1A	2014-11-19
Amount	UoM	Unit type	ST ECOPACK Grade	
90.00	mg	Each	ECOPACK® 2	

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

Package Designator	Size	Nbr of instances	Shape	
QFN	6, 5, 1	8	pin	
Comment	Package: Power FLAT 5x6 8L SINGLE; MDF valid for STL9N60M2			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	false
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)	true
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
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

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				true
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration						Mfr Item Name	SHM4*MQ6DB62					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die (s)	Other inorganic materials	2.889	mg	supplier	die	Silicon (Si)	7440-21-3		2.732	mg	945656	30356
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.075	mg	25961	833
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.018	mg	6231	200
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.027	mg	9346	300
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	692	22
die (s)				supplier	metallization	Nickel (Ni)	7440-02-0		0.026	mg	9000	289
die (s)				supplier	metallization	Silver (Ag)	7440-22-4		0.009	mg	3115	100
Leadframe	Copper & its alloys	43.642	mg	supplier	alloy	Copper (Cu)	7440-50-8		41.848	mg	958893	464978
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.984	mg	22547	10933
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.059	mg	1352	656
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.052	mg	1192	578
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		0.699	mg	16017	7767
Soft solder	Solder	2.658	mg	JIG Table A	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	2.539	mg	955229	28211
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.066	mg	24831	733
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.053	mg	19940	589
Bonding wire	Other inorganic materials	0.116	mg	supplier	wire	Copper (Cu)	7440-50-8		0.116	mg	1000000	1289
encapsulation	Other inorganic materials	40.546	mg	supplier	mold compound	Silica, vitreous	60676-86-0		37.546	mg	926010	417178
encapsulation				supplier	mold compound	epoxy resin	85954-11-6		1.622	mg	40004	18022
encapsulation				supplier	mold compound	phenol resin	26834-02-6		1.216	mg	29991	13511
encapsulation				supplier	mold compound	carbon black	1333-86-4		0.162	mg	3995	1800
connections coating	Solder	0.149	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.149	mg	1000000	1656