



## 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>

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2015-03-18
<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 Material 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/support.html">http://www.st.com/web/en/support/support.html</a>		

**Uncertainty Statement**


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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
	TSLW*MQFLB62	A	SH1A	2015-03-18
Amount	UoM	Unit type	ST ECOPACK Grade	
4430.00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
NAC	NAC	NAC		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
ting is used or other bulk terminat	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	15.75-20.15-5.15	3	Through-hole	
Comment	Package: TO 247; MDF valid for STW40N65M2			

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 2014				
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	TSLW*MQFLB62						
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	23.466	mg	supplier	die	Silicon (Si)	7440-21-3		22.535	mg	960326	5087	
				supplier	metallization	Aluminium (Al)	7429-90-5		0.448	mg	19091	101	
				supplier	Passivation	Silicon Nitride	12033-89-5		0.106	mg	4517	24	
				supplier	Passivation	Silicon Oxide	7631-86-9		0.158	mg	6733	36	
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.011	mg	469	2	
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.154	mg	6563	35	
Leadframe	Copper & its alloys	2814.336	mg	supplier	back side metallization	Silver (Ag)	7440-22-4		0.054	mg	2301	12	
				supplier	alloy	Copper (Cu)	7440-50-8		2798.651	mg	994427	631750	
				supplier	alloy	Iron (Fe)	7439-89-6		1.289	mg	458	291	
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		2.354	mg	836	531	
				supplier	metallization	Nickel (Ni)	7440-02-0		11.968	mg	4253	2702	
				supplier	metallization	Phosphorus (P)	12185-10-3		0.074	mg	26	17	
Soft solder	Solder	14.776	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high met	14.111	mg	954995	3185	
				supplier	solder	Silver (Ag)	7440-22-4		0.369	mg	24973	83	
				supplier	solder	Tin (Sn)	7440-31-5		0.296	mg	20032	67	
				supplier	wire	Aluminium (Al)	7429-90-5		1.504	mg	999336	340	
encapsulation	Other inorganic materials	1566.621	mg	supplier	wire	Magnesium (Mg)	7439-95-4		0.001	mg	664	0	
				supplier	mold compound	Silica, vitreous	60676-86-0		1362.960	mg	870000	307666	
				supplier	mold compound	Epoxy resin	Proprietary		156.662	mg	100000	35364	
				supplier	mold compound	Phenol resin	Proprietary		39.166	mg	25000	8841	
connections coating	Solder	9.296	mg	supplier	mold compound	Carbon Black	1333-86-4		7.833	mg	5000	1768	
				supplier	solder alloy	Tin (Sn)	7440-31-5		9.296	mg	1000000	2098	
				JIG - R	solder alloy	Lead (Pb)	7439-92-1		0.000	mg			
				supplier	solder alloy	Copper (Cu)	7440-50-8		0.000	mg			