



## 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>	2014-05-09
<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>	Emilio Castelli	<b>Representative Title</b>	APG MD 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>	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
TDA7786	AA5W*MV6AADQ	A	Z4DA	2014-05-09
Amount	UoM	Unit type	ST ECOPACK Grade	
376.39	mg	Each	ECOPACK® 1	

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	
NAC	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	10x10x1.4	64	flat	
Comment				

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-16th December 2013				
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	AASW*MV6AADQ					
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	12.345	mg	supplier	die	Silicon (Si)	7440-21-3		11.937	mg	966950	31714
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.066	mg	5346	175
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0.118	mg	9559	314
die (s)				supplier	metallization	Tantalum (Ta)	7440-25-7		0.007	mg	567	19
die (s)				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	81	3
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.006	mg	486	16
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.006	mg	486	16
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.028	mg	2268	74
die (s)				supplier	passivation	Indium Tin oxide ( In2O3.SnO2 )	50926-11-9		0.176	mg	14257	468
Leadframe	Copper & its alloys	109.469	mg	supplier	Alloy	Cu	7440-50-8		106.207	mg	970202	282170
Leadframe				supplier	Alloy	Zn	7440-66-6		0.164	mg	1498	436
Leadframe				supplier	Coating	Ag	7440-22-4		0.547	mg	4997	1453
Die attach1	Other Organic Materials	0.929	mg	supplier	Epoxy	Silver	7440-22-4		0.687	mg	739505	1825
Die attach1				supplier	Epoxy	Acrylic resin	Trade secret		0.084	mg	90420	223
Die attach1				supplier	Epoxy	Polybutadiene derivative	Trade secret		0.046	mg	49516	122
Die attach1				supplier	Epoxy	Butadiene copolymer	Trade secret		0.014	mg	15070	37
Die attach1				supplier	Epoxy	Acrylate	Trade secret		0.056	mg	60280	149
Die attach1				supplier	Epoxy	Epoxy resin	Trade secret		0.023	mg	24758	61
Die attach1				supplier	Epoxy	Peroxide	Trade secret		0.005	mg	5382	13
Die attach1				supplier	Epoxy	Additive	Trade secret		0.014	mg	15070	37
Die attach2	Other Organic Materials	0.172	mg	supplier	Epoxy	Silica, amorphous, fused	60676-86-0		0.086	mg	500000	228
Die attach2				supplier	Epoxy	Bismaleimide monomer	Trade secret		0.043	mg	250000	114
Die attach2				supplier	Epoxy	Acrylate monomer	Trade secret		0.017	mg	98837	45
Die attach2				supplier	Epoxy	Epoxy resin	Trade secret		0.017	mg	98837	45
Die attach2				supplier	Epoxy	Acrylic resin	Trade secret		0.009	mg	52326	24
Bonding wire1	Other inorganic materials	1.516	mg	supplier	Bonding wire	Au	7440-57-5		1.501	mg	990106	3988
Bonding wire1				supplier	Bonding wire	others	N/A		0.015	mg	9894	40
Bonding wire2	Other inorganic materials	0.489	mg	supplier	Bonding wire	Au	7440-57-5		0.484	mg	989775	1286
Bonding wire2				supplier	Bonding wire	pd	7440-05-3		0.005	mg	10225	13
Encapsulation	Other inorganic materials	249.383	mg	supplier	Molding Compound	Epoxy resin1	Trade secret		6.235	mg	25002	16565
Encapsulation				supplier	Molding Compound	Epoxy resin2	Trade secret		1.995	mg	8000	5300
Encapsulation				supplier	Molding Compound	Epoxy resin3	Trade secret		7.481	mg	29998	19876
Encapsulation				supplier	Molding Compound	Hardener1	Trade secret		9.975	mg	39999	26502
Encapsulation				supplier	Molding Compound	Carbon black	1333-86-4		0.499	mg	2001	1326
Encapsulation				supplier	Molding Compound	Amorphous silica	60676-86-0		219.457	mg	880000	583053
Encapsulation				supplier	Molding Compound	Crystal silica	14808-60-7		3.741	mg	15001	9939
Finishing	Other inorganic materials	2.091	mg	supplier	Connection coating	Sn	7440-31-5		2.091	mg	1000000	5555