



## 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>	2014-12-01
<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/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
SPC564B74L7C9ECY	E91T*FB74CAQ	A	MA1A	2014-12-01
Amount	UoM	Unit type	ST ECOPACK Grade	
1650.00	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	
NAC	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	24x24x1.4	176	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 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	E91T*FB74CAQ					
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	48.638	mg	supplier	die	Silicon (Si)	7440-21-3		38.257	mg	786566	23186
Die or Dies (choose)				supplier	metallization	Aluminium (Al)	7429-90-5		0.071	mg	1460	43
Die or Dies (choose)				supplier	metallization	Copper (Cu)	7440-50-8		0.628	mg	12912	381
Die or Dies (choose)				supplier	metallization	Tantalum (Ta)	7440-25-7		8.697	mg	178811	5271
Die or Dies (choose)				supplier	metallization	Cobalt (Co)	7440-48-4		0.002	mg	41	1
Die or Dies (choose)				supplier	metallization	Titanium (Ti)	7440-32-6		0.007	mg	144	4
Die or Dies (choose)				supplier	metallization	Tungsten (W)	7440-33-7		0.005	mg	103	3
Die or Dies (choose)				supplier	passivation	Silicon Nitride (SiN)	12033-89-5		0.159	mg	3269	96
Die or Dies (choose)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.406	mg	8347	246
Die or Dies (choose)				supplier	glass coating	Glass: Silicon Dioxide (SiO2)	7631-86-9		0.406	mg	8347	246
Leadframe	Copper & its alloys	432.375	mg	supplier	alloy	Copper (Cu)	7440-50-8		403.192	mg	932505	244359
Leadframe				supplier	alloy	Nickel (Ni)	7440-02-0		12.574	mg	29081	7621
Leadframe				supplier	alloy	Magnesium (Mg)	7439-95-4		0.629	mg	1455	381
Leadframe				supplier	alloy	Silicon (Si)	7440-21-3		2.724	mg	6300	1651
Leadframe				supplier	tape	bismaleimide	35325-39-4		0.095	mg	220	58
Leadframe				supplier	tape	poly(4,4'-oxydiphenylene-pyromellitimide)	25036-53-7		9.338	mg	21597	5659
Leadframe				supplier	tape	Zinc hydroxide	20427-58-1		0.095	mg	220	58
Die attach		7.413	mg	supplier	glue or tape (choose)	Silver (Ag)	7440-22-4		5.856	mg	789964	3549
Die attach				#N/A	glue or tape	Urethane acrylate oligomer	Proprietary		0.519	mg	70012	315
Die attach				supplier	glue or tape	isobornyl Methacrylate	7534-94-3		0.519	mg	70012	315
Die attach				#N/A	glue or tape	Acrylate	Proprietary		0.519	mg	70012	315
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		1.012	mg	979671	613
Bonding wire				supplier	wire	Palladium (Pd)	7440-05-3		0.019	mg	18393	12
Bonding wire				supplier	wire	Silver (Ag)	7440-22-4		0.002	mg	1936	1
encapsulation		1149.899	mg	#N/A	mold compound	Epoxy Resin	Proprietary		84.139	mg	73171	50993
encapsulation				#N/A	mold compound	Phenol Resin	Proprietary		84.139	mg	73171	50993
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		969.279	mg	842925	587442
encapsulation				supplier	mold compound	Quartz	14808-60-7		3.366	mg	2927	2040
encapsulation				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		5.610	mg	4879	3400
encapsulation				supplier	mold compound	Carbon black	1333-86-4		3.366	mg	2927	2040
connections coating	Solder	10.116	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		10.116	mg	1000000	6131