



## 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>2015-03-25</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>	<b>Emilio Castelli</b>	<b>Representative Title</b>	<b>APG MD CHAMPION</b>
<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
SPC560P54L3BEABY	F91L*FP60ABQ	A	MA1A	2015-03-25
Amount		UoM	Unit type	ST ECOPACK Grade
681.44		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	14x14x1.4	100	flat	
Comment				

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	<b>true</b>
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				<b>true</b>
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration						Mfr Item Name	F91L*FP60ABQ					
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	Other inorganic materials	23.059	mg	supplier	die	Silicon (Si)	7440-21-3		20.047	mg	869379	29419
Die or Dies				supplier	metallization	Aluminium (Al)	7429-90-5		0.074	mg	3209	109
Die or Dies				supplier	metallization	Copper (Cu)	7440-50-8		0.483	mg	20946	709
Die or Dies				supplier	metallization	Tantalum (Ta)	7440-25-7		1.853	mg	80359	2719
Die or Dies				supplier	metallization	Cobalt (Co)	7440-48-4		0.002	mg	87	3
Die or Dies				supplier	metallization	Tungsten (W)	7440-33-7		0.217	mg	9411	318
Die or Dies				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.057	mg	2472	84
Die or Dies				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.163	mg	7069	239
Die or Dies				supplier	glass coating	Glass: Silicon Dioxide (SiO2)	7631-86-9		0.163	mg	7069	239
Leadframe	Copper & its alloys	181.707	mg	supplier	alloy	Copper (Cu)	7440-50-8		171.323	mg	942853	251413
Leadframe				supplier	alloy	Nickel (Ni)	7440-02-0		5.343	mg	29404	7841
Leadframe				supplier	alloy	Magnesium (Mg)	7439-95-4		0.267	mg	1469	392
Leadframe				supplier	alloy	Silicon (Si)	7440-21-3		1.158	mg	6373	1699
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		3.616	mg	19900	5306
Die attach		4.424	mg	supplier	glue or tape	Isobornyl Methacrylate	7534-94-3		0.243	mg	54928	357
Die attach				#N/A	glue or tape	Bismaleimide resin	Proprietary		0.177	mg	40009	260
Die attach				#N/A	glue or tape	spacer polymer	Proprietary		0.022	mg	4973	32
Die attach				supplier	glue or tape	Silver (Ag)	7440-22-4		3.982	mg	900090	5844
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		0.553	mg	980496	812
Bonding wire				supplier	wire	Palladium (Pd)	7440-05-3		0.010	mg	17730	15
Bonding wire				supplier	wire	Silver (Ag)	7440-22-4		0.001	mg	1773	1
encapsulation		465.730	mg	#N/A	mold compound	Epoxy Resin	Proprietary		34.078	mg	73171	50009
encapsulation				#N/A	mold compound	Phenol Resin	Proprietary		34.078	mg	73171	50009
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		392.576	mg	842926	576098
encapsulation				supplier	mold compound	Quartz	14808-60-7		1.363	mg	2927	2000
encapsulation				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		2.272	mg	4878	3334
encapsulation				supplier	mold compound	Carbon black	1333-86-4		1.363	mg	2927	2000
connections coating	Solder	5.748	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		5.748	mg	1000000	8435