



## 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

*\* : Required Field*

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2015-08-28
<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
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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
SPC560P44L3CEFAR	F91L*FP50BEQ	A	MA1A	2015-08-28
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		
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	
CHP	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*FP50BEQ					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	17.198	mg	supplier	die	Silicon (Si)	7440-21-3		15.161	mg	881556	22248
Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.028	mg	1628	41
Die				supplier	metallization	Copper (Cu)	7440-50-8		0.249	mg	14478	365
Die				supplier	metallization	Tantalum (Ta)	7440-25-7		1.369	mg	79602	2009
Die				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	58	1
Die				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	174	4
Die				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	116	3
Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.063	mg	3663	92
Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.161	mg	9362	236
Die				supplier	glass coating	Glass: Silicon Dioxide (SiO2)	7631-86-9		0.161	mg	9362	236
Leadframe	Copper & its alloys	181.694	mg	supplier	alloy	Copper (Cu)	7440-50-8		171.311	mg	942854	251396
Leadframe				supplier	alloy	Nickel (Ni)	7440-02-0		5.342	mg	29401	7839
Leadframe				supplier	alloy	Magnesium (Mg)	7439-95-4		0.267	mg	1470	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	19902	5306
Die attach		3.528	mg	supplier	glue or tape	Isobornyl Methacrylate	7534-94-3		0.194	mg	54989	285
Die attach				supplier	glue or tape	Bismaleimide resin	Proprietary		0.141	mg	39966	207
Die attach				supplier	glue or tape	spacer polymer	Proprietary		0.018	mg	5102	26
Die attach				supplier	glue or tape	Silver (Ag)	7440-22-4		3.175	mg	899943	4659
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		0.637	mg	980000	935
Bonding wire				supplier	wire	Palladium (Pd)	7440-05-3		0.012	mg	18462	18
Bonding wire				supplier	wire	Silver (Ag)	7440-22-4		0.001	mg	1538	1
encapsulation		472.407	mg	supplier	mold compound	Epoxy Resin	Proprietary		34.566	mg	73170	50725
encapsulation				supplier	mold compound	Phenol Resin	Proprietary		34.566	mg	73170	50725
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		398.207	mg	842932	584361
encapsulation				supplier	mold compound	Quartz	14808-60-7		1.382	mg	2925	2028
encapsulation				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		2.304	mg	4877	3381
encapsulation				supplier	mold compound	Carbon black	1333-86-4		1.382	mg	2925	2028
connections coating	Solder	5.748	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		5.748	mg	1000000	8435