



## 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>	2016-04-11
<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
SPC570S40E3CEFAY	B9YE*FE50BBQ	A	MA1A	2016-04-11
	Amount	UoM	Unit type	ST ECOPACK Grade
	520.00	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	Nicke/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	14x14x1.0	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-17th Dec 2015				
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	B9YE *FE50BBQ					
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	11.305	mg	supplier	die	Silicon (Si)	7440-21-3		10.685	mg	945157	20548
Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.024	mg	2123	46
Die				supplier	metallization	Copper (Cu)	7440-50-8		0.145	mg	12826	279
Die				supplier	metallization	Tantalum (Ta)	7440-25-7		0.298	mg	26360	573
Die				supplier	metallization	Titanium (Ti)	7440-32-6		0.006	mg	531	12
Die				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	88	2
Die				supplier	metallization	Nickel (Ni)	7440-02-0		0.001	mg	88	2
Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.033	mg	2919	63
Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.112	mg	9907	215
Leadframe	Copper & Its alloys	217.346	mg	supplier	alloy	Copper (Cu)	7440-50-8		207.323	mg	953885	398698
Leadframe				supplier	alloy	Nickel (Ni)	7440-02-0		6.465	mg	29745	12433
Leadframe				supplier	alloy	Magnesium (Mg)	7439-95-4		0.323	mg	1486	621
Leadframe				supplier	alloy	Silicon (Si)	7440-21-3		1.401	mg	6446	2694
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		1.681	mg	7734	3233
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.108	mg	497	208
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.045	mg	207	87
Die attach		2.676	mg	supplier	glue or tape	Bismaleimide resin	na		0.080	mg	29895	154
Die attach				supplier	glue or tape	Isobornyl Methacrylate	7534-94-3		0.201	mg	75112	387
Die attach				supplier	glue or tape	Silver (Ag)	7440-22-4		2.395	mg	894993	4606
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		1.990	mg	1000000	3827
encapsulation		286.584	mg	supplier	mold compound	Epoxy Resin	Proprietary		20.970	mg	73172	40327
encapsulation				supplier	mold compound	Phenol Resin	Proprietary		20.970	mg	73172	40327
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		241.568	mg	842922	464554
encapsulation				supplier	mold compound	Quartz	14808-60-7		0.839	mg	2928	1613
encapsulation				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		1.398	mg	4878	2688
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.839	mg	2928	1613