



## Materials Declaration Form

<b>IPC</b>	<b>1752</b>	<b>Version</b>	<b>2</b>
<b>Form Type *</b>	<b>Distribute</b>		
<b>Sectionals *</b>	<b>Material Info</b> <b>Manufacturing Info</b>	<b>Subsectionals *</b>	<b>A-D</b>

*\* : Required Field*

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2020-03-20</b>
<b>Company Unique ID</b>	<b>NL 008751171B01</b>		
<b>Contact Name *</b>	Refer to Supplier Comment section		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>giovanni giacopello</b>	<b>Representative Title</b>	<b>ADG 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/support.html">http://www.st.com/web/en/support/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
SPC560P40L3C2FAR	D91L*FP40ACQ	A	1054	2020-03-20
	Amount	UoM	Unit type	ST ECOPACK Grade
	681	mg	Each	ECOPACK 2
Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant ( in each organic material)			

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	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	CD00393898	

Package Designator	Size	Nbr of instances	Shape	
QFP	14.00,14.00,1.00	100	gull wing	
Comment	LQFP 100 14x14x1.4 1. MDF valid for CPs: SPC560P40L3B2FAR,SPC560P40L3B2FAY,SPC560P40L3B2FBR,SPC560P40L3B2FBY,SPC560P40L3BEAAR,SPC560P40L3BEAAY,SPC560P40L3C2FAR,SPC560P40L3C2FAY,SPC560P40L3C2FBR,SPC560P40L3C2FBY,SPC560P40L3CEAAR,SPC560P40L3CEAAY,SPC560P40L3CEFAR,SPC560P40L3CEFAY,SPC560P40L3CEFBR,SPC560P40L3CEFBY			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-March 2015	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	TRUE
2 - 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
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	FALSE
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	FALSE
Exemption Id.	Description

QueryList : ELV directive : 2000/53/EC amended 2017/2096 _November 2017	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	TRUE
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	FALSE
Exemption Id.	Description

QueryList : California Prop65 list, dated 3rd January 2020			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			TRUE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			FALSE
Substance	amount in product (mg)	Application	ppm in product

QueryList : REACH-16th January 2020				
Query				Response
1 - Product(s) 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
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Embedded article nor Homogeneous Material above the limits per the definition within REACH				TRUE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material

Material Composition Declaration :						Mfr Item Name	D91L*FP40ACQ					
note : Substance present with less 0.001mg will not be declared in this document												
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	M-011 Other inorganic materials	11.568	mg	supplier	die	Silicon(Si)	7440-21-3		11.136	mg	962656	16342
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.021	mg	1815	31
				supplier	metallisation	Copper(Cu)	7440-50-8		0.183	mg	15820	266
				supplier	metallisation	Cobalt(Co)	7440-48-4		0.001	mg	86	1
				supplier	metallisation	Tantalum(Ta)	7440-25-7		0.059	mg	5100	87
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.002	mg	173	3
				supplier	metallisation	Tungsten(W)	7440-33-7		0.002	mg	173	3
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.046	mg	3976	68
				supplier	passivation	Silicon oxide	7631-86-9		0.118	mg	10201	173
				supplier	alloy & coating	Copper(Cu)	7440-50-8		169.072	mg	877212	248110
Leadframe	M-004 Copper and its alloys	192.738	mg	supplier	alloy & coating	Iron(Fe)	7439-89-6		3.977	mg	20634	5836
				supplier	alloy & coating	Iron Phosphide(FeP)	26508-33-8		0.239	mg	1240	351
				supplier	alloy & coating	Zinc(Zn)	7440-66-6		0.208	mg	1079	305
				supplier	alloy & coating	Silver (Ag)	7440-22-4		0.035	mg	182	51
				supplier	tape	Polyimide film	proprietary		9.604	mg	49829	14094
				supplier	tape	Polyethylene-terephthalate film	proprietary		6.531	mg	33885	9584
				supplier	tape	Acrylonitrilebutadiene rubber	proprietary		1.152	mg	5977	1691
				supplier	tape	Bismaleimide	proprietary		0.960	mg	4981	1409
				supplier	tape	Phenol type resin	proprietary		0.960	mg	4981	1409
				supplier	glue	Silver(Ag)	7440-22-4		1.574	mg	894827	2310
Die attach	M-011 Other inorganic materials	1.759	mg	supplier	glue	Isobornyl Methacrylate	7534-94-3		0.097	mg	55145	142
				supplier	glue	Bismaleimide resin	proprietary		0.070	mg	39794	103
				supplier	glue	Epoxy cyclohexylethyltrimethoxysilane	3388-04-3		0.009	mg	5117	13
				supplier	glue	Spacer polymer	proprietary		0.009	mg	5117	13
				supplier	wire	Copper(Cu)	7440-50-8		0.631	mg	970769	926
Bonding wires	M-004 Copper and its alloys	0.650	mg	supplier	wire	Palladium(Pd)	7440-05-3		0.019	mg	29231	28
				supplier	mold compound	Silica vitreous	60676-86-0		405.261	mg	864000	594713
Encapsulation	M-011 Other inorganic materials	469.052	mg	supplier	mold compound	Epoxy type resin	proprietary		35.179	mg	75000	51625
				supplier	mold compound	Phenol type resin	proprietary		23.453	mg	50001	34417
				supplier	mold compound	Mercaptopropyl trimethoxysilane	4420-74-0		2.345	mg	4999	3441
				supplier	mold compound	Quartz	14808-60-7		1.407	mg	3000	2065
				supplier	mold compound	Carbon black	1333-86-4		1.407	mg	3000	2065
				supplier	solder alloy	Tin (Sn)	7440-31-5		5.673	mg	1000000	8325
connections coating	Solder	5.673	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		5.673	mg	1000000	8325