Materials Declaration Form

IPC	1752	**Version**	2
Form Type *	Distribute		
Sectionals *	Material Info Manufacturing Info	**Subsectionals ***	A-D ** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	**Response Date ***	2016-05-17
Contact Name *	Refer to " Supplier Comment" section	**Contact Title**	Refer to " Supplier Comment" section
Contact Phone *	Refer to " Supplier Comment" section	**Contact Email ***	Refer to " Supplier Comment" section
Authorized Representative *	Emilio Castelli	**Representative Title**	ADG MD CHAMPION
Representative Phone *	Refer to " Supplier Comment" section	**Representative Email ***	Refer to " Supplier Comment" section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/online_tech_support.html		

Uncertainty Statement

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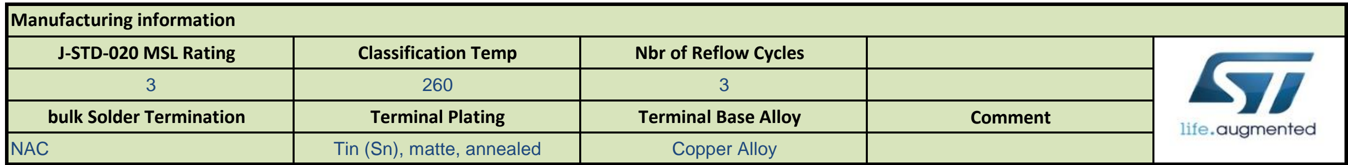
Legal Statement

Supplier Acceptance *	true	**Legal Declaration ***	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 omprehensive 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**
SPC560C50L3C6E0X	C91L*FB50BFQ	A	MA1A	2016-05-17
	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	
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	**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	C91L*FB50BFQ					
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	17.814	mg	supplier	die	Silicon (Si)	7440-21-3		15.661	mg	879140	22982
Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.029	mg	1628	43
Die				supplier	metallization	Copper (Cu)	7440-50-8		0.257	mg	14427	377
Die				supplier	metallization	Tantalum (Ta)	7440-25-7		1.464	mg	82183	2148
Die				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	56	1
Die				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	168	4
Die				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	112	3
Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.065	mg	3649	95
Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.166	mg	9319	244
Die				supplier	glass coating	Glass: Silicon Dioxide (Si02)	7631-86-9		0.166	mg	9319	244
Leadframe	Copper & its alloys	181.693	mg	supplier	alloy	Copper (Cu)	7440-50-8		171.310	mg	942854	251394
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		3.621	mg	supplier	glue or tape	Isobornyl Methacrylate	7534-94-3		0.199	mg	54957	292
Die attach				supplier	glue or tape	Bismaleimide resin	Proprietary		0.145	mg	40044	213
Die attach				supplier	glue or tape	spacer polymer	Proprietary		0.018	mg	4971	26
Die attach				supplier	glue or tape	Silver (Ag)	7440-22-4		3.259	mg	900028	4783
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		0.678	mg	981187	995
Bonding wire				supplier	wire	Palladium (Pd)	7440-05-3		0.012	mg	17366	18
Bonding wire				supplier	wire	Silver (Ag)	7440-22-4		0.001	mg	1447	1
encapsulation		471.657	mg	supplier	mold compound	Epoxy Resin	Proprietary		34.511	mg	73170	50644
encapsulation				supplier	mold compound	Phenol Resin	Proprietary		34.511	mg	73170	50644
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		397.574	mg	842930	583432
encapsulation				supplier	mold compound	Quartz	14808-60-7		1.380	mg	2926	2025
encapsulation				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		2.301	mg	4879	3377
encapsulation				supplier	mold compound	Carbon black	1333-86-4		1.380	mg	2926	2025
connections coating	Solder	5.748	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		5.748	mg	1000000	8435