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 ***	2014-09-29
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**	APG 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/support.html		

Uncertainty Statement

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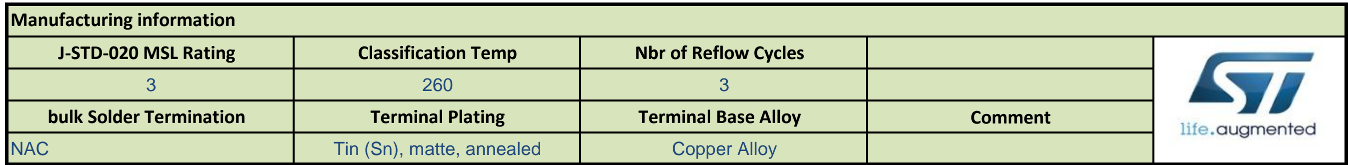
Legal Statement

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**
SPC560D40L3C4E0X	B91L*FB40ACQ	A	MA1A	2014-09-29
	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	**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**	**B91L*FB40ACQ**					
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 (choose)	Other inorganic materials	12.099	mg	supplier	die	Silicon (Si)	7440-21-3		10.913	mg	901975	16015
Die or Dies (choose)				supplier	metallization	Aluminium (Al)	7429-90-5		0.020	mg	1653	29
Die or Dies (choose)				supplier	metallization	Copper (Cu)	7440-50-8		0.179	mg	14795	263
Die or Dies (choose)				supplier	metallization	Tantalum (Ta)	7440-25-7		0.707	mg	58435	1038
Die or Dies (choose)				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	165	3
Die or Dies (choose)				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	83	1
Die or Dies (choose)				supplier	passivation	Silicon Nitride (SiN)	12033-89-5		0.045	mg	3719	66
Die or Dies (choose)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.116	mg	9588	170
Die or Dies (choose)				supplier	glass coating	Glass: Silicon Dioxide (Si02)	7631-86-9		0.116	mg	9588	170
Leadframe	Copper & its alloys	181.695	mg	supplier	alloy	Copper (Cu)	7440-50-8		171.312	mg	942855	251397
Leadframe				supplier	alloy	Nickel (Ni)	7440-02-0		5.342	mg	29401	7839
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	19901	5306
Die attach		2.722	mg	supplier	glue or tape (choose)	Isobornyl Methacrylate	7534-94-3		0.150	mg	55107	220
Die attach				#N/A	glue or tape	Bismaleimide resin	Proprietary		0.109	mg	40044	160
Die attach				#N/A	glue or tape	spacer polymer	Proprietary		0.014	mg	5143	21
Die attach				supplier	glue or tape	Silver (Ag)	7440-22-4		2.449	mg	899706	3594
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		0.754	mg	980494	1106
Bonding wire				supplier	wire	Palladium (Pd)	7440-05-3		0.014	mg	18205	21
Bonding wire				supplier	wire	Silver (Ag)	7440-22-4		0.001	mg	1300	1
encapsulation		478.192	mg	#N/A	mold compound	Epoxy Resin	Proprietary		34.990	mg	73171	51347
encapsulation				#N/A	mold compound	Phenol Resin	Proprietary		34.990	mg	73171	51347
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		403.079	mg	842923	591511
encapsulation				supplier	mold compound	Quartz	14808-60-7		1.400	mg	2928	2054
encapsulation				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		2.333	mg	4879	3424
encapsulation				supplier	mold compound	Carbon black	1333-86-4		1.400	mg	2928	2054
connections coating	Solder	5.748	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		5.748	mg	1000000	8435