	# 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 *	2013-10-16
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 *	Laurent Tosi	Representative Title	MMS MD CHAMPION
Representative Phone *	(+33) 442 685 795	Representative Email *	laurent.tosi@st.com
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/online_tech_support.html		

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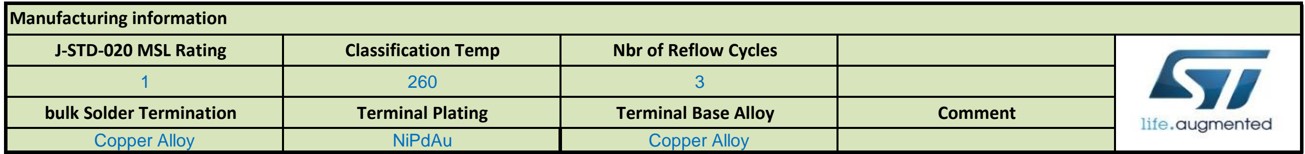
Legal Statement

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
-	PT6P*2SB31UA	A	Shenzhen	2013-10-15
	Amount	**UoM**	**Unit type**	**ST ECOPACK Grade**
	34.00	mg	Each	ECOPACK® 2



Manufacturing information

J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		life.augmented
1	260	3		
bulk Solder Termination	**Terminal Plating**	**Terminal Base Alloy**	**Comment**	
Copper Alloy	NiPdAu	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
TSSOP	3.0 x 4.4 x 1	8	L bend	
Comment	TSSOP8			

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-20th June 2013				
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**	**PT6P*2SB31UA**					
Homogeneous Material	**Material Group**	**Mass**	**UoM**	**Level**	**Substance Category**	**Substance**	**CAS**	**Exempt**	**Mass**	**UoM**	**Concentration in homogeneous material (ppm)**	**Concentration in product (ppm)**
die (s)	Other inorganic materials	1.899	mg	supplier	die	Silicon (Si)	7440-21-3		1.820	mg	958399	53529
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	3686	206
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0.007	mg	3686	206
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	527	29
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	527	29
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.005	mg	2633	147
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.058	mg	30542	1706
Lead-frame	Other inorganic materials	14.517	mg	supplier	alloy	Copper (Cu)	7440-50-8		14.147	mg	974500	416079
Lead-frame				supplier	alloy	Iron (Fe)	7439-89-6		0.341	mg	23460	10017
Lead-frame				supplier	alloy	Zinc (Zn)	7440-66-6		0.017	mg	1200	512
Lead-frame				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.012	mg	840	359
Lead-frame Coating	Other inorganic materials	0.098	mg	supplier	coating	Nickel (Ni)	7440-02-0		0.090	mg	916800	2655
Lead-frame Coating				supplier	coating	Palladium (Pd)	7440-05-3		0.006	mg	58700	170
Lead-frame Coating				supplier	coating	Gold (Au)	7440-57-5		0.002	mg	24500	71
Die Attach	Other inorganic materials	0.513	mg	supplier	glue or soft solder	Silver (Ag)	7440-22-4		0.411	mg	800000	12079
Die Attach				supplier	glue or soft solder	2,6-Diglycidylphenyl allyl ether	13561-08-5		0.077	mg	150000	2265
Die Attach				supplier	glue or soft solder	1,4-bis (2,3-epoxypropoxy) butane	2425-79-8		0.010	mg	20000	302
Die Attach				supplier	glue or soft solder	Polyoxypropylenediamine	9046-10-0		0.015	mg	30000	453
Wires	Other inorganic materials	0.039	mg	supplier	Bonding wire	Gold (Au)	7440-57-5		0.039	mg	1000000	1160
Encapsulation	Other inorganic materials	16.932	mg	supplier	Moulding Compound	Epoxy Resin	na		1.276	mg	75344	37522
Encapsulation				supplier	Moulding Compound	Phenol Resin	na		0.851	mg	50229	25015
Encapsulation				supplier	Moulding Compound	Silicon Dioxide	60676-86-0		14.653	mg	865385	430971
Encapsulation				supplier	Moulding Compound	Carbon-black	1333-86-4		0.085	mg	5023	2501
Encapsulation				supplier	Moulding Compound	Bismuth (Bi)	7440-69-9		0.068	mg	4018	2001
Finishing	Other inorganic materials	0.001	mg	supplier	connections coating	Nickel (Ni)	7440-02-0		0.001	mg	916800	27
Finishing				supplier	connections coating	Palladium (Pd)	7440-05-3		0.000	mg	58700	2