Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2014-11-21
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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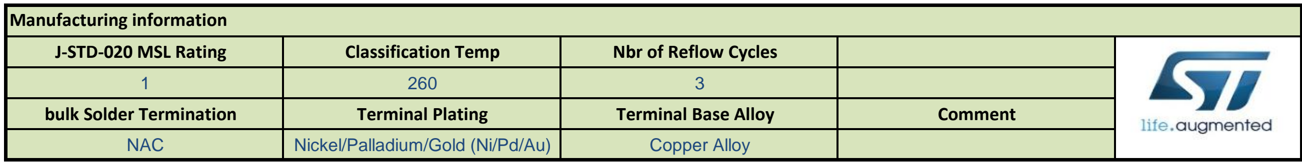
Legal Statement

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
M24128-BFDW6TP	PT6P*24281TA	A	3068	2014-11-21
	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	
NAC	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
TSSOP	NAC	8	L bend	
Comment	TSSOP 8 BODY 4.4 PITCH 0.65			

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 December 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*24281TA					
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	0.563	mg	supplier	die	Silicon (Si)	7440-21-3		0.541	mg	960924	15912
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.002	mg	3552	59
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0.002	mg	3552	59
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.001	mg	1776	29
die (s)				supplier	passivation	Indium Tin oxide (In203:SnO2)	50926-11-9		0.017	mg	30195	500
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	0.062	mg	supplier	coating	Nickel (Ni)	7440-02-0		0.056	mg	914840	1658
Lead-frame Coating				supplier	coating	Palladium (Pd)	7440-05-3		0.002	mg	29660	54
Lead-frame Coating				supplier	coating	Gold (Au)	7440-57-5		0.002	mg	27750	50
Lead-frame Coating				supplier	coating	Silver (Ag)	7440-22-4		0.002	mg	27750	50
Die Attach	Other inorganic materials	0.049	mg	supplier	glue or soft solder	Poly(tetrafluoroethylene)	9002-84-0		0.025	mg	510000	735
Die Attach				supplier	glue or soft solder	Synthetic resin	Proprietary		0.010	mg	200000	288
Die Attach				supplier	glue or soft solder	Bismaleimide resin	Proprietary		0.010	mg	200000	288
Die Attach				supplier	glue or soft solder	Titanium dioxide	13463-67-7		0.002	mg	40000	58
Die Attach				supplier	glue or soft solder	Silica, amorphous	7631-86-9		0.002	mg	50000	72
Wires	Other inorganic materials	0.019	mg	supplier	Bonding wire	Copper (Cu)	7440-50-8		0.019	mg	1000000	546
Encapsulation	Other inorganic materials	18.790	mg	supplier	Moulding Compound	Epoxy Resin	Proprietary		1.434	mg	76328	42183
Encapsulation				supplier	Moulding Compound	Phenol Resin	Proprietary		0.956	mg	50885	28122
Encapsulation				supplier	Moulding Compound	Silica, vitreous	60676-86-0		16.228	mg	863628	477291
Encapsulation				supplier	Moulding Compound	Carbon black	1333-86-4		0.096	mg	5089	2812
Encapsulation				supplier	Moulding Compound	Bismuth (Bi)	7440-69-9		0.076	mg	4071	2250
Finishing	Other inorganic materials	0.001	mg	supplier	connections coating	Nickel (Ni)	7440-02-0		0.001	mg	914840	17
Finishing				supplier	connections coating	Palladium (Pd)	7440-05-3		0.000	mg	29660	1
Finishing				supplier	connections coating	Gold (Au)	7440-57-5		0.000	mg	27750	1
Finishing				supplier	connections coating	Silver (Ag)	7440-22-4		0.000	mg	27750	1