



Materials Declaration Form

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

** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2017-09-18
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		

Uncertainty Statement

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Legal Statement

Supplier Acceptance *	true	Legal Declaration *	Standard
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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
M24M02-DRMN6TP	PHO7*24M21KA	A	3068	2017-09-18
	Amount	UoM	Unit type	ST ECOPACK Grade
	80.00	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	Nicke/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SON	NAC	8	L bend	
Comment	PLASTIC SMALL OUTLINE PACKAGE 8L			

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	PHO7*24M21KA					
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	5.003	mg	supplier	die	Silicon (Si)	7440-21-3		4.7990	mg	959224	59988
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.0180	mg	3598	225
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0.0180	mg	3598	225
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.0020	mg	400	25
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.0020	mg	400	25
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.0120	mg	2399	150
die (s)				supplier	passivation	Indium Tin oxide (In2O3.SnO2)	50926-11-9		0.1520	mg	30382	1900
Lead-frame	Other inorganic materials	17.694	mg	supplier	alloy	Copper (Cu)	7440-50-8		17.2427	mg	974500	215533
Lead-frame				supplier	alloy	Iron (Fe)	7439-89-6		0.4151	mg	23460	5189
Lead-frame				supplier	alloy	Zinc (Zn)	7440-66-6		0.0212	mg	1200	265
Lead-frame				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.0149	mg	840	186
Lead-frame Coating	Other inorganic materials	0.078	mg	supplier	coating	Nickel (Ni)	7440-02-0		0.0712	mg	914840	890
Lead-frame Coating				supplier	coating	Palladium (Pd)	7440-05-3		0.0023	mg	29660	29
Lead-frame Coating				supplier	coating	Gold (Au)	7440-57-5		0.0022	mg	27750	27
Lead-frame Coating				supplier	coating	Silver (Ag)	7440-22-4		0.0022	mg	27750	27
Die Attach	Other inorganic materials	0.721	mg	supplier	glue or soft solder	Silver (Ag)	7440-22-4		0.6487	mg	900000	8108
Die Attach				supplier	glue or soft solder	acrylate	na		0.0432	mg	60000	541
Die Attach				supplier	glue or soft solder	Methacrylate	na		0.0274	mg	38000	342
Die Attach				supplier	glue or soft solder	acrylate	na		0.0014	mg	2000	18
Wires	Other inorganic materials	0.029	mg	supplier	Bonding wire	Copper (Cu)	7440-50-8		0.0292	mg	1000000	365
Encapsulation	Other inorganic materials	56.475	mg	supplier	Moulding Compound	Epoxy Resin	na		4.5569	mg	80690	56961
Encapsulation				supplier	Moulding Compound	Phenol Resin	na		3.0379	mg	53793	37974
Encapsulation				supplier	Moulding Compound	Silica, vitreous	60676-86-0		48.3329	mg	855835	604161
Encapsulation				supplier	Moulding Compound	Carbon-black	1333-86-4		0.3038	mg	5379	3797
Encapsulation				supplier	Bismuth/Bismuth Compounds	Bismuth	7440-69-9		0.2430	mg	4303	3038
Finishing	Other inorganic materials	0.001	mg	supplier	connections coating	Nickel (Ni)	7440-02-0		0.0007	mg	914840	9
Finishing				supplier	connections coating	Palladium (Pd)	7440-05-3		0.0000	mg	29660	0
Finishing				supplier	connections coating	Gold (Au)	7440-57-5		0.0000	mg	27750	0
Finishing				supplier	connections coating	Silver (Ag)	7440-22-4		0.0000	mg	27750	0