



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 *	2018-04-06
Company Unique ID	NL 008751171B01		
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Authorized Representative *	MDG MD CHAMPION	Representative Title	MDG 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 *
Legal Statement	<p>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.</p>

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
M93S46-WMN6P	PH07*CS461KA	A	3068	2018-04-06
	Amount	UoM	Unit type	ST ECOPACK Grade
	80.00	mg	Each	ECOPACK® 2
	Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant (in each organic material)		

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	
SON	NAC	8	Gull Wing	
Comment	Package : 07 SO 08 .15 JEDEC 0016023			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	TRUE
2 - 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
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	FALSE
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	FALSE
Exemption Id.	Description

QueryList : REACH-12th January 2017				
Query				Response
1 - Product(s) 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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	PHO7*CS461KA				7000000.0	999998.0
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	M-011 Other inorganic materials	0.511	mg	supplier	die	Silicon (Si)	7440-21-3		0.492	mg	962818	6150
				supplier	metallization	Aluminium (Al)	7429-90-5		0.002	mg	3914	25
				supplier	Passivation	Silicon Nitride	12033-89-5		0.001	mg	1957	13
Lead-frame	M-011 Other inorganic materials	17.694	mg	supplier	Passivation	Silicon Oxide	7631-86-9		0.016	mg	31311	200
				supplier	alloy	Copper (Cu)	7440-50-8		17.243	mg	974500	215533
				supplier	alloy	Iron (Fe)	7439-89-6		0.415	mg	23460	5189
				supplier	alloy	Zinc (Zn)	7440-66-6		0.021	mg	1200	265
Lead-frame Coating	M-011 Other inorganic materials	0.078	mg	supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.015	mg	840	186
				supplier	coating	Nickel (Ni)	7440-02-0		0.071	mg	914840	890
				supplier	coating	Palladium (Pd)	7440-05-3		0.002	mg	29660	29
				supplier	coating	Gold (Au)	7440-57-5		0.002	mg	27750	27
Die Attach	M-011 Other inorganic materials	0.721	mg	supplier	coating	Silver (Ag)	7440-22-4		0.002	mg	27750	27
				supplier	glue or soft solder	Silver (Ag)	7440-22-4		0.649	mg	900000	8108
				supplier	glue or soft solder	acrylate	Proprietary		0.043	mg	60000	541
				supplier	glue or soft solder	Methacrylate	Proprietary		0.027	mg	38000	342
Wires	M-011 Other inorganic materials	0.029	mg	supplier	glue or soft solder	acrylate	Proprietary		0.001	mg	2000	18
				supplier	Bonding wire	Copper (Cu)	7440-50-8		0.029	mg	1000000	365
				supplier	Moulding Compound	Epoxy Resin	Proprietary		4.557	mg	74744	56961
Encapsulation	M-011 Other inorganic materials	60.967	mg	supplier	Moulding Compound	Phenol Resin	Proprietary		3.038	mg	49830	37974
				supplier	Moulding Compound	Silica, vitreous	60676-86-0		52.825	mg	866457	660311
				supplier	Moulding Compound	Carbon-black	1333-86-4		0.304	mg	4983	3797
				supplier	Bismuth/Bismuth Compounds	Bismuth	7440-69-9		0.243	mg	3986	3038
Finishing	M-011 Other inorganic materials	0.001	mg	supplier	connections coating	Nickel (Ni)	7440-02-0		0.001	mg	914840	9
				supplier	connections coating	Palladium (Pd)	7440-05-3		0.000	mg	29660	0
				supplier	connections coating	Gold (Au)	7440-57-5		0.000	mg	27750	0
				supplier	connections coating	Silver (Ag)	7440-22-4		0.000	mg	27750	0