



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 *	2016-09-08
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Floriana San Biagio	Representative Title	AMG 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
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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
	RBO7*H070ARY	A	ZY1A	2016-09-08
Amount	UoM	Unit type	ST ECOPACK Grade	
80.00	mg	Each	ECOPACK® 3	

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	
Not Applicable ; if coating is used o	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	4.85x3.9x1.52	8	gull wing	
Comment	Package: 07 SO 08 .15 JEDEC; MDF valid for TSH80IYDT			

QueryList : ROHS directive 2011/65/EU _ July 2011	
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
5 - Product(s) is obsolete, no information is available	false
6 - Product(s) is unknown, no information is available	false
Exemption Id.	Description

QueryList : REACH-20th June 2016				
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						Mfr Item Name	RBO7*H070ARY					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	0.790	mg	supplier	die	Silicon (Si)	7440-21-3		0.783	mg	991139	9788
				supplier	metallization	Aluminium (Al)	7429-90-5		0.003	mg	3797	38
				supplier	Passivation	Silicon Nitride	12033-89-5		0.002	mg	2532	25
				supplier	Passivation	Silicon Oxide	7631-86-9		0.002	mg	2532	25
				supplier	Alloy	Copper (Cu)	7440-50-8		31.785	mg	957596	397315
Leadframe	Copper & its alloys	33.193	mg	supplier	Alloy	Iron (Fe)	7439-89-6		0.767	mg	23094	9582
				supplier	Alloy	Zinc (Zn)	7440-66-6		0.041	mg	1228	510
				supplier	Alloy	Iron Phosphide (FeP)	26508-33-8		0.027	mg	811	336
				supplier	Alloy	Nickel (Ni)	7440-02-0		0.548	mg	16501	6846
				supplier	Alloy	Palladium (Pd)	7440-05-3		0.016	mg	476	197
Die attach	Other Organic Materials	0.393	mg	supplier	Alloy	Gold (Au)	7440-57-5		0.010	mg	294	122
				supplier	Glue	Silver(Ag)	7440-22-4		0.303	mg	770229	3784
				supplier	Glue	Epoxy resin A	9003-36-5		0.028	mg	69975	344
				supplier	Glue	Epoxy resin B	Proprietary		0.016	mg	39949	196
				supplier	Glue	.gamma -Butyrolactone	96-48-0		0.016	mg	39949	196
Bonding wires	Precious metals	0.156	mg	supplier	Glue	Polyoxypropylenediamine	9046-10-0		0.016	mg	39949	196
				supplier	Glue	Fatty acids,C18-unsatd., dimers, polymers w/ d	68475-94-5		0.016	mg	39949	196
				supplier	wire	Gold (Au)	7440-57-5		0.154	mg	990506	1930
				supplier	wire	Palladium (Pd)	7440-05-3		0.001	mg	9494	19
				supplier	Molding compound	Epoxy Resin	Proprietary		2.956	mg	65013	36950
Encapsulation	Other Organic Materials	45.468	mg	supplier	Molding compound	Silica fused A	7631-86-9		1.364	mg	29999	17050
				supplier	Molding compound	Silica fused B	60676-86-0		40.018	mg	880135	500225
				supplier	Molding compound	Carbon Black	1333-86-4		0.220	mg	4839	2750
				supplier	Molding compound	Phenol Resin	9003-35-4		0.910	mg	20014	11375