



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 *	2016-01-19
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Floriana San Biagio	Representative Title	AMS MD CHAMPION
Representative Phone *	Refer to Supplier Comment section		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

While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.

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 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
	IDQ7*R8516Y	A	BO2A	2016-01-19
Amount	UoM	Unit type	ST ECOPACK Grade	
155.00	mg	Each	ECOPACK® 3	
	Comment	ECOPACK® 3 is STMicroelectronics trade name for ROHS compliant device without use of any ROHS exemption and without Halogen nor Antimony		

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
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	
DSO	4.85x3.9x1.52	16	gull wing	
Comment	Package: Q7 SO 16 .15 TO JEDEC MS-012; MDF valid for M74HC4851YRM13TR			

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
Exemption Id.	Description

QueryList : REACH-17th December 2015				
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	IDQ7*R8516Y					
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	1.052	mg	supplier	die	Silicon (Si)	7440-21-3		1.028	mg	977186	6632
				supplier	metallization	Aluminium (Al)	7429-90-5		0.005	mg	4753	32
				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	1901	13
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	951	6
				supplier	Passivation	Silicon Nitride	12033-89-5		0.003	mg	2852	19
				supplier	Passivation	Silicon Oxide	7631-86-9		0.013	mg	12357	84
Leadframe	Copper & its alloys	38.271	mg	supplier	alloy	Copper (Cu)	7440-50-8		36.956	mg	965640	238426
				supplier	alloy	Iron (Fe)	7439-89-6		0.869	mg	22706	5606
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.052	mg	1359	335
				supplier	alloy	Zinc (Zn)	7440-66-6		0.046	mg	1202	297
				supplier	metallization	Nickel (Ni)	7440-02-0		0.117	mg	3057	755
				supplier	metallization	Palladium (Pd)	7440-05-3		0.005	mg	131	32
				supplier	metallization	Gold (Au)	7440-57-5		0.004	mg	105	26
				supplier	metallization	Silver (Ag)	7440-22-4		0.222	mg	5801	1432
				supplier	glue	Silver (Ag)	7440-22-4		0.361	mg	878345	2329
Die attach	Other Organic Materials	0.411	mg	supplier	glue	Isobornyl Methacrylate	7534-94-3		0.021	mg	51095	135
				supplier	glue	Urethane Methacrylate Resin	5888-33-5		0.021	mg	51095	135
				supplier	glue	Acrylate polymer	87320-05-6		0.008	mg	19465	52
Bonding wires	Copper & its alloys	0.075	mg	supplier	wire	Copper (Cu)	7440-50-8		0.075	mg	1000000	484
Encapsulation	Other Organic Materials	115.191	mg	supplier	mold compound	Silica, vitreous	60676-86-0		99.755	mg	865996	643581
				supplier	mold compound	Epoxy Resin	Proprietary		8.639	mg	74997	55735
				supplier	mold compound	Phenol Resin	Proprietary		5.760	mg	50004	37161
				supplier	mold compound	Carbon black	1333-86-4		0.576	mg	5000	3716
				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.461	mg	4002	2974