



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 *	2017-03-08
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Antonella Lanzafame	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		

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Legal Statement			
Supplier Acceptance *	true	Legal Declaration *	Standard
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
ULQ2004D1013TR	PZQ7*L204AA6	A	SH1A	2017-03-08
	Amount	UoM	Unit type	ST ECOPACK Grade
	150.00	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	
DSO	3.9x9.85x1.52	16	gull wing	
Comment	Package: Q7 SO 16 .15 TO JEDEC MS-012			

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 :						Mfr Item Name	PZQ7*L204AA6					
note : Substance present with less 0.001mg will not be declared in this document												
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	2.418	mg	supplier	die	Silicon (Si)	7440-21-3		2.341	mg	968156	15607
				supplier	metallization	Aluminium (Al)	7429-90-5		0.030	mg	12407	200
				supplier	Passivation	Silicon Nitride	12033-89-5		0.010	mg	4136	67
				supplier	Passivation	Silicon Oxide	7631-86-9		0.014	mg	5790	93
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.002	mg	827	13
				supplier	back side metallization	Gold (Au)	7440-57-5		0.005	mg	2068	33
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.016	mg	6617	107
Leadframe	Copper & its alloys	43.784	mg	supplier	alloy	Copper (Cu)	7440-50-8		42.418	mg	968801	282787
				supplier	alloy	Iron (Fe)	7439-89-6		0.998	mg	22794	6653
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.060	mg	1370	400
				supplier	alloy	Zinc (Zn)	7440-66-6		0.052	mg	1188	347
				supplier	metallization	Nickel (Ni)	7440-02-0		0.234	mg	5344	1560
				supplier	metallization	Palladium (Pd)	7440-05-3		0.008	mg	183	53
				supplier	metallization	Gold (Au)	7440-57-5		0.007	mg	160	47
Die attach	Other Organic Materials	0.880	mg	supplier	metallization	Silver (Ag)	7440-22-4		0.007	mg	160	47
				supplier	glue	Silver (Ag)	7440-22-4		0.774	mg	879545	5160
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.044	mg	50000	293
				supplier	glue	Urethane Methacrylate Resin	5888-33-5		0.044	mg	50000	293
				supplier	glue	Acrylate polymer	87320-05-6		0.018	mg	20455	120
Bonding wires	Other inorganic materials	0.092	mg	supplier	wire	Copper (Cu)	7440-50-8		0.092	mg	1000000	613
Encapsulation	Other Organic Materials	102.826	mg	supplier	mold compound	Silica, vitreous	60676-86-0		90.178	mg	876996	601187
				supplier	mold compound	Epoxy resin	85954-11-6		4.113	mg	40000	27420
				supplier	mold compound	Epoxy	29690-82-2		4.113	mg	40000	27420
				supplier	mold compound	phenol resin	Proprietary		3.085	mg	30002	20567
				supplier	mold compound	additive	Proprietary		1.028	mg	9997	6853
				supplier	mold compound	carbon black	1333-86-4		0.309	mg	3005	2060
										mg		