



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D <i>* : Required Field</i>

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2017-11-27
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 *	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

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
	KRO7*UD09EC6	A	SH1A	2017-11-27
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
3	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	4.85x3.9x1.52	8	gull wing	
Comment	Package: O7 SO 08 .15 JEDEC; MDF valid for L5970D013TR			

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-7th July 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	KRO7*UD09EC6									
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	5.023	mg	supplier	die	Silicon (Si)	7440-21-3		4.792	mg	954012	59900				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.032	mg	6371	400				
				supplier	metallization	Tungsten (W)	7440-33-7		0.050	mg	9954	625				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.008	mg	1593	100				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.074	mg	14732	925				
				supplier	polymer die coating	PIXI Gamma-butyrolactone	96-48-0		0.037	mg	7366	463				
Leadframe	Copper & its alloys	37.244	mg	supplier	alloy	Copper (Cu)	7440-50-8		35.999	mg	966572	449988				
				supplier	alloy	Iron (Fe)	7439-89-6		0.847	mg	22742	10588				
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.051	mg	1369	638				
				supplier	alloy	Zinc (Zn)	7440-66-6		0.044	mg	1181	550				
				supplier	metallization	Nickel (Ni)	7440-02-0		0.278	mg	7464	3475				
				supplier	metallization	Palladium (Pd)	7440-05-3		0.009	mg	242	113				
				supplier	metallization	Gold (Au)	7440-57-5		0.008	mg	215	100				
				supplier	metallization	Silver (Ag)	7440-22-4		0.008	mg	215	100				
				Die attach	Other inorganic materials	1.426	mg	supplier	glue	Silver (Ag)	7440-22-4		1.161	mg	814165	14513
								supplier	glue	Isobornyl Methacrylate	7534-94-3		0.066	mg	46283	825
supplier	glue	Urethane Methacrylate Resin	5888-33-5						0.066	mg	46283	825				
supplier	glue	Acrylate polymer	87320-05-6						0.066	mg	46283	825				
supplier	glue	Epoxycyclohexylethyltrimethoxysilane	3388-04-3						0.066	mg	46283	825				
supplier	glue	tert-Butyl peroxy(2-ethyl)-hexanoate	3006-82-4						0.001	mg	701	13				
Bonding wire encapsulation	Other inorganic materials	0.138	mg	supplier	wire	Copper (Cu)	7440-50-8		0.138	mg	1000000	1725				
				supplier	mold compound	Silica, vitreous	60676-86-0		31.322	mg	865990	391525				
				supplier	mold compound	Epoxy Resin	85954-11-6		2.713	mg	75009	33913				
				supplier	mold compound	Phenol Resin	26834-02-6		1.808	mg	49988	22600				
				supplier	mold compound	Carbon black	1333-86-4		0.181	mg	5004	2263				
				supplier	mold compound	Bismuth compound	7440-69-9		0.145	mg	4009	1813				