



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2016-05-10
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
	CDO7*3272AF6	A	BO2A	2016-05-10
Amount	UoM	Unit type	ST ECOPACK Grade	
80.00	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		 life.augmented
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte, annealed	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 TSH22IDT			

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	CD07*3272AF6					
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	2.462	mg	supplier	die	Silicon (Si)	7440-21-3		2.419	mg	982535	30238
				supplier	metallization	Aluminium (Al)	7429-90-5		0.020	mg	8123	250
				supplier	Passivation	Silicon Nitride	12033-89-5		0.010	mg	4062	125
				supplier	Passivation	Silicon Oxide	7631-86-9		0.013	mg	5280	163
Leadframe	Copper & its alloys	30.328	mg	supplier	alloy	Copper (Cu)	7440-50-8		30.072	mg	991559	375900
				supplier	alloy	Iron (Fe)	7439-89-6		0.015	mg	495	188
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.024	mg	791	300
				supplier	metallization	Silver (Ag)	7440-22-4		0.217	mg	7155	2713
Die attach	Other Organic Materials	0.891	mg	supplier	glue	Silver (Ag)	7440-22-4		0.783	mg	878788	9788
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.045	mg	50505	563
				supplier	glue	Urethane Methacrylate Resin	5888-33-5		0.045	mg	50505	563
				supplier	glue	Acrylate polymer	87320-05-6		0.018	mg	20202	225
Bonding wires	Other inorganic materials	0.065	mg	supplier	wire	Copper (Cu)	7440-50-8		0.065	mg	1000000	813
Encapsulation	Other Organic Materials	45.196	mg	supplier	mold compound	Silica, vitreous	60676-86-0		39.139	mg	865984	489238
				supplier	mold compound	Epoxy Resin	Proprietary		3.390	mg	75007	42375
				supplier	mold compound	Phenol Resin	Proprietary		2.260	mg	50004	28250
				supplier	mold compound	Carbon black	1333-86-4		0.226	mg	5000	2825
connections coating	Solder	1.058	mg	supplier	mold compound	Bismuth compound	7440-69-9		0.181	mg	4005	2263
				supplier	solder alloy	Tin (Sn)	7440-31-5		1.058	mg	1000000	13225