



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 *	2017-03-22
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 *	Antonella Lanzafame	Representative Title	AMG Materials Declaration 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
STP16DPS05MTR	4C9U*UQ40J51	A	MU1A	2017-03-22
Amount	UoM	Unit type	ST ECOPACK Grade	
653.38	mg	Each	ECOPACK® 1	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
1	250	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	7.5,15.4,2.50	24	gull wing	
Comment	SO 24 .30 TO JEDEC MS-013AD			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	true
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
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
Product(s) is unknown, no information is available	false
Exemption Id.	Description

QueryList : REACH-12th January 2017				
Query				Response
The product 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	4CSU*UQ0J51					
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	1.769	mg	supplier	die	Silicon (Si)	7440-21-3		1.689	mg	954777	2585
die				supplier	metallization	Aluminium (Al)	7429-90-5		0.018	mg	10175	28
die				supplier	metallization	Tungsten (W)	7440-33-7		0.014	mg	7914	21
die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.004	mg	2261	6
die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.03	mg	16959	46
die				supplier	passivation	Gamma-butyrolactone	96-48-0		0.01	mg	5653	15
die				supplier	passivation	Polyhydroxyamide	55295-98-2		0.004	mg	2261	6
Leadframe	Copper & its alloys	199.929	mg	supplier	alloy	Copper (Cu)	7440-50-8		194.602	mg	973356	297839
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		4.577	mg	22893	7005
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.276	mg	1380	422
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.24	mg	1200	367
Leadframe	Nickel (Ni)			supplier	metallization	Nickel (Ni)	7440-02-0		0.214	mg	1070	328
Leadframe	Precious metals			supplier	metallization	Palladium (Pd)	7440-05-3		0.014	mg	70	21
Leadframe	Precious metals			supplier	metallization	Gold (Au)	7440-57-5		0.006	mg	30	9
Soft solder	Solder	0.267	mg	supplier	solder	Silver (Ag)	7440-22-4		0.206	mg	771536	315
Soft solder				supplier	solder	Epoxy Cresol Novolak	29690-82-2		0.06	mg	224719	92
Soft solder				supplier	solder	1-isopropyl-2,2-dimethyltrimethylene diisobut	6846-50-0		0.001	mg	3745	2
Bonding wire	Precious metals	0.582	mg	supplier	wire	Gold (Au)	7440-57-5		0.582	mg	1000000	891
encapsulation	Other Organic Materials	450.833	mg	supplier	mold compound	Silica, vitreous	60676-86-0		355.335	mg	788174	543841
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		31.092	mg	68966	47586
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		17.767	mg	39409	27192
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		26.65	mg	59113	40788
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		5.33	mg	11823	8158
encapsulation				JIG I	mold compound	Brominated Epoxy Resin	40039-93-8		6.663	mg	14779	10198
encapsulation				JIG I	mold compound	Brominated Epoxy Resin	40039-93-8		6.663	mg	14779	10198
encapsulation				supplier	mold compound	Carbon black	1333-86-4		1.333	mg	2957	2040