



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 *	2016-12-07
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

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
	A5YP*UA32AE5	A	ZY1A	2016-12-07
	Amount	UoM	Unit type	ST ECOPACK Grade
	78.50	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		

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	
tin is used or other bulk terminati	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	6.5x4.5x1	20	gull wing	
Comment	Package: YP HTSSOP 20 4.4 PITCH 0.65 EXPAD; MDF valid for PM8803			

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-20th June 2016				
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	ASYP*UA32AE5					
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	3.679	mg	supplier	die	Silicon (Si)	7440-21-3		3.486	mg	947540	44408
				supplier	metallization	Aluminium (Al)	7429-90-5		0.036	mg	9785	459
				supplier	metallization	Tungsten (W)	7440-33-7		0.028	mg	7611	357
				supplier	Passivation	Silicon Nitride	12033-89-5		0.007	mg	1903	89
				supplier	Passivation	Silicon Oxide	7631-86-9		0.061	mg	16581	777
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.003	mg	815	38
				supplier	back side metallization	Gold (Au)	7440-57-5		0.007	mg	1903	89
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.013	mg	3534	166
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.001	mg	272	13
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.037	mg	10057	471
Leadframe	Copper & its alloys	36.089	mg	supplier	alloy	Copper (Cu)	7440-50-8		33.929	mg	940148	432217
				supplier	alloy	Nickel (Ni)	7440-02-0		1.058	mg	29316	13478
				supplier	alloy	Silicon (Si)	7440-21-3		0.229	mg	6345	2917
				supplier	alloy	Magnesium (Mg)	7439-95-4		0.053	mg	1469	675
				supplier	metallization	Silver(Ag)	7440-22-4		0.820	mg	22722	10446
Die attach	Other Organic Materials	0.911	mg	supplier	glue	Silver (Ag)	7440-22-4		0.726	mg	796926	9248
				supplier	glue	Bisphenol F type epoxy resin	9003-36-5		0.073	mg	80132	930
				supplier	glue	Epoxy resin	68475-94-5		0.028	mg	30735	357
				supplier	glue	2,6-Diglycidyl phenyl allyl ether	EC 417-470-1		0.028	mg	30735	357
				supplier	glue	Gamma Butyrolactone	96-48-0		0.028	mg	30735	357
				supplier	glue	Polyoxypropylenediamine	9046-10-0		0.028	mg	30735	357
Bonding wires	Precious metals	0.416	mg	supplier	wire	Gold (Au)	7440-57-5		0.412	mg	990385	5248
				supplier	wire	Palladium (Pd)	7440-05-3		0.004	mg	9615	51
Encapsulation	Other Organic Materials	35.485	mg	supplier	mold compound	Epoxy Resin	25068-38-6		3.194	mg	90010	40688
				supplier	mold compound	Silica fused (SiO2)	60676-86-0		29.808	mg	840017	379720
				supplier	mold compound	Phenol Resin	29690-82-2		2.306	mg	64985	29376
				supplier	mold compound	Carbon Black	1333-86-4		0.177	mg	4988	2255
				supplier	solder alloy	Tin (Sn)	7440-31-5		1.919	mg	1000000	24446
Finishing	Other inorganic materials	1.919	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.919	mg	1000000	24446