



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 *	2016-09-12
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		

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
	BR61*UD73EEA	A	ZY1A	2016-09-12
	Amount	UoM	Unit type	ST ECOPACK Grade
	79.52	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	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	4.85 - 3.9 - 1.52	8	gull wing	
Comment	Package: HSOP 8L .150, MD valid for CP: B5973D, B5973DTR.			

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
5 - Product(s) is obsolete, no information is available	false
6 - Product(s) is unknown, no information is available	false
Exemption Id.	Description

ELV exemption number	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	false
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	true
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	BR61*UD73EEA		79.5200			
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or Dies	Other inorganic materials	5.020	mg	supplier	die	Silicon (Si)	7440-21-3		4.792	mg	954582	60262
				supplier	metallization	Aluminium (Al)	7429-90-5		0.032	mg	6375	402
				supplier	metallization	Tungsten (W)	7440-33-7		0.050	mg	9960	629
				supplier	Passivation	Silicon Nitride	12033-89-5		0.008	mg	1594	101
				supplier	Passivation	Silicon Oxide	7631-86-9		0.074	mg	14741	931
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.003	mg	598	38
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.024	mg	4781	302
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.037	mg	7371	465
				supplier	alloy	Copper (Cu)	7440-50-8		30.075	mg	958199	378207
				supplier	alloy	Iron (Fe)	7439-89-6		0.725	mg	23099	9117
Lead frame	Copper & its alloys	31.387	mg	supplier	alloy	Zinc (Zn)	7440-66-6		0.037	mg	1179	465
				supplier	alloy	Phosphorus (P)	12185-10-3		0.010	mg	319	126
				supplier	metallization	Silver(Ag)	7440-22-4		0.540	mg	17205	6791
				supplier	glue or tape	Epoxy resin A	9003-36-5		0.044	mg	69291	553
				supplier	glue or tape	Epoxy resin B	68475-94-5		0.025	mg	39370	314
				supplier	glue or tape	Silver(Ag)	7440-22-4		0.491	mg	773228	6175
				supplier	glue or tape	Lactone	96-48-0		0.025	mg	39370	314
				supplier	glue or tape	Polyoxypropylenediamine	9046-10-0		0.025	mg	39370	314
				supplier	glue or tape	2,6-Diglycidyl phenyl allyl ether oligomer	Proprietary		0.025	mg	39370	314
				supplier	wire	Gold (Au)	7440-57-5		0.254	mg	1000000	3194
Encapsulation	Other inorganic materials	40.912	mg	supplier	mold compound	Epoxy Resin	25068-38-6		3.068	mg	74990	38581
				supplier	mold compound	Silica fused (SiO2)	60676-86-0		35.185	mg	860017	442467
				supplier	mold compound	Phenol Resin	29690-82-2		1.636	mg	39988	20573
				supplier	mold compound	Carbon Black	1333-86-4		0.205	mg	5011	2578
				supplier	mold compound	Epoxy, Cresol Novolac	29690-82-2		0.818	mg	19994	10287
Connections coating	Solder	1.312	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.312	mg	1000000	16499