Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2015-09-10
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 *	Giovanni Giacopello	Representative Title	IPD 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/online_tech_support.html		

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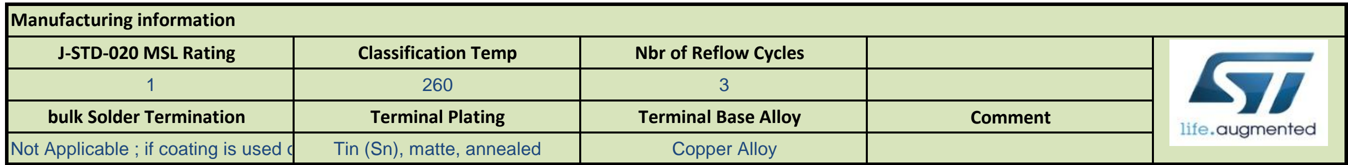
Legal Statement

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 omprehensive 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
	ACWJ*EAY14V4	A	ZS1A	2015-09-10
	Amount	UoM	Unit type	ST ECOPACK Grade
	16.00	mg	Each	ECOPACK® 2



Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used c	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	2.8 - 1.5 - 0.9	5	gull wing	
Comment	Package: SOT 23 5 LEADS TRANSIL ARRAY; MDF valid for ESDA14V2SC5SY; ESDA14V2SC5Y			

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-15th June 2015				
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	ACWJ*EAY14V4					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Silicon Die	Other inorganic materials	0.614	mg	supplier	die	Silicon (Si)	7440-21-3		0.594	mg	967427	37125
Silicon Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.009	mg	14658	563
Silicon Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.01	mg	16287	625
Silicon Die				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	1629	63
Lead-frame	Other inorganic materials	6.97	mg	supplier	alloy	Copper (Cu)	7440-50-8		6.731	mg	965710	420688
Lead-frame				supplier	alloy	Iron (Fe)	7439-89-6		0.158	mg	22669	9875
Lead-frame				supplier	alloy	Phosphorus (P)	12185-10-3		0.002	mg	287	125
Lead-frame				supplier	alloy	Zinc (Zn)	7440-66-6		0.009	mg	1291	563
Lead-frame				supplier	metallization	Silver (Ag)	7440-02-0		0.07	mg	10043	4375
Die Attach	Other inorganic materials	0.067	mg	supplier	glue	Silver (Ag)	7440-22-4		0.046	mg	686567	2875
Die Attach				supplier	glue	methylene diacrylate	42594-17-2		0.017	mg	253731	1063
Die Attach				supplier	glue	Dicyclopentenyloxyethyl methacrylate	68586-19-6		0.002	mg	29851	125
Die Attach				supplier	glue	Polymer of Polybutadiene + Anhydride	Proprietary		0.002	mg	29851	125
Bonding wire	Other inorganic materials	0.153	mg	supplier	wire	Gold (Au)	7440-57-5		0.153	mg	1000000	9563
encapsulation	Other inorganic materials	7.804	mg	supplier	mold compound	Silica, vitreous	60676-86-0		6.657	mg	853024	416063
encapsulation				supplier	mold compound	phenolic resin	Proprietary		0.273	mg	34982	17063
encapsulation				supplier	mold compound	epoxy resin	Proprietary		0.312	mg	39979	19500
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.156	mg	19990	9750
encapsulation				supplier	mold compound	carbon black	1333-86-4		0.016	mg	2050	1000
encapsulation				supplier	mold compound	Zinc hydroxide	20427-58-1		0.078	mg	9995	4875
encapsulation				supplier	mold compound	Magnesium hydroxide	1309-42-8		0.312	mg	39979	19500
connections coating	Solder	0.392	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.392	mg	1000000	24500