



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 *	2015-03-09
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	AMS & 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/internet/com/support/online_tech_support.jsp		

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
	A98C*UR38AE6	A	MU1A	2015-03-09
Amount	UoM	Unit type	ST ECOPACK Grade	
1929.67	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
3	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy		
Not Applicable ; if coating is used o	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	15.9X11X3.5	29	gull wing	
Comment	Package: PowerSO 36 .430 BODY WIDTH; MDF valid for L6229PD; L6229PDTR			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	false
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)	true
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
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

QueryList : REACH-17th December 2014				
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	A98C*UR38AE6					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die (s)	Other inorganic materials	9.43	mg	supplier	die	Silicon (Si)	7440-21-3		9.147	mg	969989	4740
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.069	mg	7317	36
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.008	mg	848	4
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.02	mg	2121	10
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.119	mg	12619	62
die (s)				supplier	passivation	Gamma-butyrolactone	96-48-0		0.04	mg	4242	21
die (s)				supplier	passivation	Polyhydroxyamide	55295-98-2		0.018	mg	1909	9
die (s)				supplier	passivation	Alcoxysilane	proprietary		0.001	mg	106	1
die (s)				supplier	passivation	Aryl Siliclic Acid	proprietary		0.001	mg	106	1
die (s)				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.001	mg	106	1
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	106	1
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.005	mg	530	3
Leadframe	Copper & its alloys	1239.866	mg	supplier	alloy	Copper (Cu)	7440-50-8		1238.255	mg	998701	641693
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.57	mg	460	295
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		1.041	mg	840	539
Soft solder	Other organic materials	6.513	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	6.35	mg	974973	3291
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.098	mg	15047	51
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.065	mg	9980	34
Bonding wire	Other inorganic materials	1.103	mg	supplier	wire	Copper (Cu)	7440-50-8		0.875	mg	1000000	453
encapsulation	Other organic materials	667.04	mg	supplier	mold compound	Phenol Resin	205830-20-2		26.682	mg	40001	13827
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		20.011	mg	30000	10370
encapsulation				supplier	mold compound	epoxy resin	Proprietary		20.011	mg	30000	10370
encapsulation				supplier	mold compound	carbon black	1333-86-4		1.334	mg	2000	691
encapsulation				supplier	mold compound	silica vitreous	60676-86-0		599.002	mg	898000	310417
connections coating	Other inorganic materials	5.946	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		5.946	mg	1000000	3081