



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2014-09-16
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	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
	LDK7*27L4AAW	A	BO2A	2014-09-16
Amount	UoM	Unit type	ST ECOPACK Grade	
130.00	mg	Each	ECOPACK® 2	

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

Package Designator	Size	Nbr of instances	Shape	
DSO	3.9,8.65,1.37	14	gull wing	
Comment	SO 14 .15 TO JEDEC MS-012; MD valid for CP: TS27L4AIDT, TS27L4CDT, TS27L4IDT.			

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-16th June 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	LDK7*27L4AAW					
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	2.27	mg	supplier	die	Silicon (Si)	7440-21-3		2.213	mg	974890	17023
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.009	mg	3965	69
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.006	mg	2643	46
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.042	mg	18502	323
Leadframe	Copper & its alloys	35.969	mg	supplier	alloy	Copper (Cu)	7440-50-8		33.452	mg	930023	257323
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.787	mg	21880	6054
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.047	mg	1307	362
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.041	mg	1140	315
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		1.642	mg	45650	12631
Soft solder	Solder	0.767	mg	supplier	solder	Silver (Ag)	7440-22-4		0.698	mg	910039	5369
Soft solder				supplier	solder	acrylate	Proprietary		0.038	mg	49544	292
Soft solder				supplier	solder	Methacrylate	Proprietary		0.031	mg	40417	238
Bonding wire	Other inorganic materials	0.077	mg	supplier	wire	Copper (Cu)	7440-50-8		0.077	mg	1000000	592
encapsulation	Other Organic Materials	90.017	mg	supplier	mold compound	Silver (Ag)	7440-22-4		81.916	mg	910006	630123
encapsulation				supplier	mold compound	acrylate	Proprietary		4.501	mg	50002	34623
encapsulation				supplier	mold compound	Methacrylate	Proprietary		3.6	mg	39992	27692
connections coating	Solder	0.9	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.9	mg	1000000	6923