



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 *	2014-05-05
Contact Name *	Refer to "Supplier Comment" section	Contact Title	
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
	7ZDP*Z05Q12U	A	SH1A	2014-05-05
Amount	UoM	Unit type	ST ECOPACK Grade	
320.00	mg	Each	ECOPACK® 1	

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 o	Tin (Sn), matte	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
SIP	6.5,6.1,2.3	3	gull wing	
Comment	TO 252 DPAK; MD valid for CP: STPS15L60CB, STPS15L60CB-TR.			

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-16th December 2013				
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	7ZDP*205Q12U					
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	6.743	mg	supplier	die	Silicon (Si)	7440-21-3		6.3	mg	934302	19688
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.261	mg	38707	816
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.006	mg	890	19
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.009	mg	1335	28
die (s)				supplier	metallization	Nickel (Ni)	7440-02-0		0.028	mg	4152	88
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.038	mg	5635	119
die (s)				supplier	passivation	Esterified polyamid	63428-83-1		0.041	mg	6080	128
die (s)				supplier	passivation	Tetraethylene glycol dimethacrylate	109-17-1		0.005	mg	742	16
die (s)				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	445	9
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.009	mg	1335	28
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.043	mg	6377	134
Leadframe	Copper & its alloys	164.985	mg	supplier	alloy	Copper (Cu)	7440-50-8		164.672	mg	998103	514600
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.165	mg	1000	516
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.049	mg	297	153
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.092	mg	558	288
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.007	mg	42	22
Soft solder	Solder	3.246	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high met	3.1	mg	955022	9688
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.081	mg	24954	253
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.065	mg	20025	203
Bonding wire	Other inorganic materials	0.692	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.692	mg	1000000	2163
encapsulation	Other Organic Materials	143.289	mg	supplier	mold compound	Silica, vitreous	60676-86-0		114.633	mg	800013	358228
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		10.03	mg	69998	31344
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		5.731	mg	39996	17909
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		8.597	mg	59998	26866
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		1.719	mg	11997	5372
encapsulation				JIG I	mold compound	Brominated Epoxy Resin	40039-93-8		2.149	mg	14998	6716
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.43	mg	3001	1344
connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3266