



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 *	2014-04-10
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 *	Giuseppe Vitali Palma	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

While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.


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*Z05Q12Q	A	SH1A	2014-04-10
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	 life.augmented	
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy		
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	6.5X6.1X2.3	2	gull wing	
Comment	Package: TO 252 DPAK ; MD valid also for STPS15L30CB-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

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*Z05Q12Q					
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	6.746	mg	supplier	die	Silicon (Si)	7440-21-3		6.303	mg	934331	19697
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.261	mg	38690	816
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.006	mg	889	19
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.009	mg	1334	28
die (s)				supplier	metallization	Nickel (Ni)	7440-02-0		0.028	mg	4151	88
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.038	mg	5633	119
die (s)				supplier	passivation	Esterified polyamid	63428-83-1		0.041	mg	6078	128
die (s)				supplier	passivation	Tetraethylene glycol dimethacrylate	109-17-1		0.005	mg	741	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	1334	28
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.043	mg	6374	134
Leadframe	Copper & its alloys	149.537	mg	supplier	alloy	Copper (Cu)	7440-50-8		149.244	mg	998041	466388
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.149	mg	996	466
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.045	mg	301	141
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.092	mg	615	288
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.007	mg	47	22
Soft solder	Other Organic Materials	4.931	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	4.709	mg	954979	14716
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.123	mg	24944	384
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.099	mg	20077	309
Bonding wire	Other inorganic materials	0.692	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.692	mg	1000000	2163
encapsulation	Other Organic Materials	157.049	mg	supplier	mold compound	Silica, vitreous	60676-86-0		125.639	mg	799999	392622
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		10.993	mg	69997	34353
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		6.282	mg	40000	19631
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		9.423	mg	60000	29447
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		1.885	mg	12003	5891
encapsulation				JIG I	mold compound	Brominated Epoxy Resin	40039-93-8		2.356	mg	15002	7363
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.471	mg	2999	1472
connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3266