




Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2013-07-23
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	<p>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.</p>

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
	7PTJ*DC121Y4	A	SH1A	2013-07-23
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	Comment	
Not Applicable ; if coating is used on	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	6.5 - 6.1 - 2.3	3	gull wing	
Comment	Package: DPAK HV 2 LEADS			

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-18 June 2012				
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	7PTJ*DC121Y4					
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	2.791	mg	supplier	die	Silicon carbide SiC	409-21-2		2.581	mg	924758	8066
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.036	mg	12899	113
die (s)				supplier	metallization	Nickel (Ni)	7440-02-0		0.109	mg	39054	341
die (s)				supplier	metallization	Gold (Au)	7440-57-5		0.03	mg	10749	94
die (s)				supplier	passivation	Gamma-butyrolactone	96-48-0		0.012	mg	4300	38
die (s)				supplier	passivation	Polyhydroxyamide	55295-98-2		0.005	mg	1791	16
die (s)				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	358	3
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.003	mg	1075	9
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.014	mg	5016	44
Leadframe	Copper & its alloys	166.927	mg	supplier	alloy	Copper (Cu)	7440-50-8		165.505	mg	991481	517203
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.166	mg	994	519
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.05	mg	300	156
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		1.199	mg	7183	3747
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.007	mg	42	22
Soft solder	Solder	2.511	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high met	2.398	mg	954998	7494
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.063	mg	25090	197
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.05	mg	19912	156
Bonding wire	Other inorganic materials	0.803		supplier	wire	Aluminium (Al)	7429-90-5		0.803	mg	1000000	2509
encapsulation	Other Organic Materials	145.923	mg	supplier	mold compound	Silica, vitreous	60676-86-0		116.738	mg	799997	364806
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		10.215	mg	70003	31922
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		5.837	mg	40001	18241
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		8.755	mg	59997	27359
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		1.751	mg	11999	5472
encapsulation				JIG I	mold compound	Brominated Epoxy Resin	40039-93-8		2.189	mg	15001	6841
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.438	mg	3002	1369
connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3266