



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 *	2016-08-03
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 *	Rossana Bonaccorso	Representative Title	ADG MD 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/web/en/support/support.html		

Uncertainty Statement

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Legal Statement

Supplier Acceptance *	true	Legal Declaration *	Standard
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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
STTH12R06DIRG	HZUR*D40S11G	A	SH1A	2016-08-03
Amount		UoM	Unit type	ST ECOPACK Grade
2170.00		mg	Each	ECOPACK® 2

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

Package Designator	Size	Nbr of instances	Shape
SIP	10,15.5,4.5	2	Through-hole
Comment	Package: DO 220 AB ISOL.		

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-20th June 2016				
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	HZUR*D40511G					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	10.133	mg	supplier	die	Silicon (Si)	7440-21-3		9.965	mg	983421	4592
				supplier	metallization	Aluminium (Al)	7429-90-5		0.056	mg	5526	26
				supplier	polymer die coating	Probimide	proprietary		0.051	mg	5033	24
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	296	1
				supplier	back side metallization	Gold (Au)	7440-57-5		0.01	mg	987	5
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.048	mg	4737	22
Leadframe	Copper & its alloys	1533.063	mg	supplier	alloy	Copper (Cu)	7440-50-8		1527.77	mg	996547	704041
				supplier	alloy	Iron (Fe)	7439-89-6		0.704	mg	459	324
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		1.285	mg	839	592
				supplier	metallization	Nickel (Ni)	7440-02-0		3.304	mg	2155	1523
Soft solder	Solder	3.6	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	3.33	mg	925000	1535
				supplier	solder	Silver (Ag)	7440-22-4		0.18	mg	50000	83
				supplier	solder	Tin (Sn)	7440-31-5		0.09	mg	25000	41
Soft solder -2	Solder	3.384	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	2.877	mg	850177	1326
				supplier	solder	Antimony (Sb)	7440-36-0		0.338	mg	99882	156
				supplier	solder	Tin (Sn)	7440-31-5		0.169	mg	49941	78
Bonding wire	Other inorganic materials	0.788	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.788	mg	1000000	361
Encapsulation	Other inorganic materials	525.623	mg	supplier	mold compound	Silica, vitreous	60676-86-0		425.753	mg	809997	196200
				supplier	mold compound	Phenol resin	9003-35-4		31.538	mg	60001	14534
				supplier	mold compound	Carbon black	1333-86-4		4.205	mg	8000	1938
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		53.614	mg	102001	24707
				supplier	mold compound	Metal hydroxide	21645-51-2		10.513	mg	20001	4845
Connections coating	Solder	4.209	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		4.209	mg	1000000	1940
Subelement	Ceramics / Glass	89.2	mg	supplier	Ceramic isolator	Nickel (Ni)	7440-02-0		1.07	mg	11996	493
				supplier	Ceramic isolator	Phosphorus (P)	12185-10-3		0.08	mg	897	37
				supplier	Ceramic isolator	Manganese (Mn)	7439-96-5		3.479	mg	39002	1603
				supplier	Ceramic isolator	Titanium (Ti)	7440-32-6		0.366	mg	4103	169
				supplier	Ceramic isolator	Molybdenum oxide	1313-27-5		4.46	mg	50000	2055
				supplier	Ceramic isolator	Alumina (Al2O3)	1344-28-1		79.745	mg	894002	36749