



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 *	2016-10-26
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giovanni Giacopello	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
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
STBR6012W	HTLV*V04C212	A	SHENZHEN B/E	2016-10-26
	Amount	UoM	Unit type	ST ECOPACK Grade
	4400.00	mg	Each	ECOPACK2

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	Comment	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	15.75-20.15-5.15	2	THROUGH HOLE	
Comment	DO 247			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	false
2 - 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
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	true
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
5 - Product(s) is obsolete, no information is available	false
6 - 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
1 - Product(s) 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	HTLV*V04C212					
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	18.979	mg	supplier	die	Silicon (Si)	7440-21-3		18.326	mg	965594	4165
				supplier	metallization	Aluminium (Al)	7429-90-5		0.228	mg	12013	52
				supplier	Passivation	Silicon Oxide	7631-86-9		0.074	mg	3899	17
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.009	mg	474	2
				supplier	back side metallization	Gold (Au)	7440-57-5		0.027	mg	1423	6
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.125	mg	6586	28
				#N/A	polymer die coating	Probinide	proprietary		0.190	mg	10011	43
				supplier	alloy	Copper (Cu)	7440-50-8		2696.060	mg	994265	612741
Leadframe	Copper & its alloys	2711.612	mg	supplier	alloy	Iron (Fe)	7439-89-6		1.242	mg	458	282
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		2.268	mg	836	515
				supplier	metallization	Nickel (Ni)	7440-02-0		11.968	mg	4414	2720
				supplier	metallization	Phosphorus (P)	12185-10-3		0.074	mg	27	17
				JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	16.100	mg	955036	3659
Soft solder	Solder	16.858	mg	supplier	solder	Silver (Ag)	7440-22-4		0.421	mg	24973	96
				supplier	solder	Tin (Sn)	7440-31-5		0.337	mg	19991	77
				supplier	wire	Aluminium (Al)	7429-90-5		4.925	mg	1000000	1119
				supplier	mold compound	Silica, vitreous	60676-86-0		1428.043	mg	870000	324555
Encapsulation	Other Organic Materials	1641.429	mg	supplier	mold compound	Epoxy resin	25068-38-6		164.143	mg	100000	37305
				supplier	mold compound	Phenol resin	29690-82-2		41.036	mg	25000	9326
				supplier	mold compound	Carbon black	1333-86-4		8.207	mg	5000	1865
Connections coating	Solder	6.197	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.197	mg	1000000	1408