



## Materials Declaration Form

<b>IPC Form Type *</b>	1752 Distribute	<b>Version</b>	2
<b>Sectionals *</b>	Material Info Manufacturing Info	<b>Subsectionals *</b>	A-D
<i>* : Required Field</i>			


Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2015-09-23
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Rossana Bonaccorso	<b>Representative Title</b>	IPD MD Champion
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**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			
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	Standard
<b>Legal Statement</b>	<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
STTH30ACSO6W	HTLV*V05B21Y	A	SHENZHEN B/E	2015-09-23
	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	
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-15th June 2015				
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*V05B21Y					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or Dies (choose)	Other inorganic materials	3.939	mg	supplier	die	Silicon (Si)	7440-21-3		3.778	mg	959127	859
				supplier	metallization	Aluminium (Al)	7429-90-5		0.056	mg	14217	13
				supplier	Passivation	Silicon Oxide	7631-86-9		0.018	mg	4570	4
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	508	0
				supplier	back side metallization	Gold (Au)	7440-57-5		0.007	mg	1777	2
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.031	mg	7870	7
				supplier	polymer die coating	Probindide	proprietary		0.047	mg	11932	11
				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
				supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	4.165	mg	955056	947
Soft solder	Solder	4.361	mg	JIG - R	solder	Silver (Ag)	7440-22-4		0.109	mg	24994	25
				supplier	solder	Tin (Sn)	7440-31-5		0.087	mg	19950	20
				supplier	wire	Aluminium (Al)	7429-90-5		3.283	mg	1000000	746
Encapsulation	Other Organic Materials	1670.608	mg	supplier	mold compound	Silica, vitreous	60676-86-0		1453.429	mg	870000	330325
				supplier	mold compound	Epoxy resin	25068-38-6		167.061	mg	100000	37968
				supplier	mold compound	Phenol resin	29690-82-2		41.765	mg	25000	9492
				supplier	mold compound	Carbon black	1333-86-4		8.353	mg	5000	1898
				supplier	solder alloy	Tin (Sn)	7440-31-5		6.197	mg	1000000	1408