



## 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>	2017-01-24
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Rossana Bonaccorso	<b>Representative Title</b>	ADG 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**


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Legal Statement			
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	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
TIP36C	TSLW*BI21T62	A	3068	2017-01-24
	Amount	UoM	Unit type	ST ECOPACK Grade
	4430.00	mg	Each	ECOPACK2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
NA	NA	NA		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	15.75-20.15-5.15	3	Through-hole	
Comment	TO 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
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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	TSLW*B121T62					
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	8.300	mg	supplier	die	Silicon (Si)	7440-21-3		7.948	mg	957590	1794
				supplier	metallization	Aluminium (Al)	7429-90-5		0.120	mg	14458	27
				supplier	Passivation	Silicon Oxide	7631-86-9		0.138	mg	16627	31
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.008	mg	963	2
				supplier	back side metallization	Gold (Au)	7440-57-5		0.020	mg	2410	5
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.066	mg	7952	15
Leadframe	Copper & its alloys	2826.184	mg	supplier	alloy	Copper (Cu)	7440-50-8		2821.522	mg	998350	636912
				supplier	alloy	Iron (Fe)	7439-89-6		1.300	mg	460	293
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		2.373	mg	840	536
				supplier	metallization	Nickel (Ni)	7440-02-0		0.915	mg	324	207
				supplier	metallization	Phosphorus (P)	12185-10-3		0.074	mg	26	16
				supplier	metallization	Lead (Pb)	7439-92-1	7a-Lead in high me	8.612	mg	955085	1944
Soft solder	Solder	9.017	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	8.612	mg	955085	1944
				supplier	solder	Silver (Ag)	7440-22-4		0.225	mg	24953	51
				supplier	solder	Tin (Sn)	7440-31-5		0.180	mg	19962	41
Bonding wires	Other inorganic materials	2.849	mg	supplier	wire	Aluminium (Al)	7429-90-5		2.849	mg	1000000	643
Encapsulation	Other Organic Materials	1574.354	mg	supplier	mold compound	Silica, vitreous	60676-86-0		1369.688	mg	870000	309185
				supplier	mold compound	Epoxy resin	25068-38-6		157.435	mg	100000	35538
				supplier	mold compound	Phenol resin	29690-82-2		39.359	mg	25000	8885
				supplier	mold compound	Carbon Black	1333-86-4		7.872	mg	5000	1777
Connections coating	Solder	9.296	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		9.296	mg	1000000	2098