



Materials Declaration Form

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

** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2017-05-15
Contact Name *	Refer to Supplier Comment section		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

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			
Supplier Acceptance *	true	Legal Declaration *	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
STI150N10F7	R117*OD0HR52	A	SHENZHEN B/E	2017-05-15
	Amount	UoM	Unit type	ST ECOPACK Grade
	1500.00	mg	Each	ECOPACK2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
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	4.5-10.2-10.55	2	Through-hole	
Comment	I2PAK			

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)	TRUE
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)

Query : California Prop65 list, dated 5th August 2016			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			FALSE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			TRUE
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.16	die backside metal - leadframe metal	107
Lead	10.91	soft solder	7271

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	R17*OD0HRS2					
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	9.268	mg	supplier	die	Silicon (Si)	7440-21-3		8.882	mg	958351	5921
				supplier	metallization	Aluminium (Al)	7429-90-5		0.116	mg	12516	77
				supplier	metallization	Titanium (Ti)	7440-32-6		0.023	mg	2482	15
				supplier	Passivation	Silicon Oxide	7631-86-9		0.132	mg	14243	88
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.006	mg	647	4
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.073	mg	7877	49
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.006	mg	647	4
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.030	mg	3237	20
Leadframe	Copper & its alloys	839.799	mg	supplier	alloy	Copper (Cu)	7440-50-8		838.613	mg	998588	559075
				supplier	alloy	Iron (Fe)	7439-89-6		0.386	mg	460	257
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.705	mg	839	470
				supplier	metallization	Nickel (Ni)	7440-02-0		0.088	mg	105	61
				supplier	metallization	Phosphorus (P)	12185-10-3		0.007	mg	8	5
Soft solder	Solder	11.421	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	10.907	mg	954995	7271
				supplier	solder	Silver (Ag)	7440-22-4		0.286	mg	25042	191
				supplier	solder	Tin (Sn)	7440-31-5		0.228	mg	19963	152
Bonding wires	Other inorganic materials	0.346	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.344	mg	994220	229
				supplier	wire	Magnesium (Mg)	7439-95-4		0.002	mg	5780	1
Bonding Ribbons	Other Nonferrous metals & alloys	8.501	mg	supplier	Ribbon	Aluminium (Al)	7429-90-5		8.501	mg	1000000	5667
Encapsulation	Other Organic Materials	626.760	mg	supplier	mold compound	Silica, vitreous	60676-86-0		545.281	mg	870000	363521
				supplier	mold compound	Epoxy resin	25068-38-6		62.676	mg	100000	41784
				supplier	mold compound	Phenol resin	29690-82-2		15.669	mg	25000	10446
Connections coating	Solder	3.905	mg	supplier	mold compound	Carbon Black	1333-86-4		3.134	mg	5000	2089
				supplier	solder alloy	Tin (Sn)	7440-31-5		3.905	mg	1000000	2603