

## **Materials Declaration Form**

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

Supplier Information								
Company Name *	STMicroelectronics	Response Date *	2016-01-26					
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 - STMicroele http://www.st.com/web/en/support/s							

## **Uncertainty Statement**

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## 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 omprehensive 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									
STPS3L40SY	BNZK*Z67QD1Y	А	ZA41	2016-01-26					
	Amount	UoM	Unit type	ST ECOPACK Grade					
	250.00	mg	Each	ECOPACK® 2					

Manufacturing information								
J-STD-020 MSL Rating	J-STD-020 MSL Rating Classification Temp Nbr of Reflow Cycles							
1	260	3						
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	life.augmented				
NAC	Tin (Sn), matte	Copper Alloy		moraagineinea				

Package Designator Size		Nbr of instances	Shape	
SOJ	4.5X2.16X3.68	1	J bend	
Comment	Package: SMC CLIP (SOD 15 NEW)			

	Query Response						
1 - Product(s) meets EU RoHS requirement without any exemptions							
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)							
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)							
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions							
5 - Product(s) is obsolete, no information is available							
6 - Product(s) is unknown, no information	on is available	false					
Exemption Id.	Exemption Id. Description						
7a Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)							

Atom pressent								
Query Response								
1 - Product(s) meets EU ELV requirements	1 - Product(s) meets EU ELV requirements without any exemptions false							
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s) true								
Exemption Id. Description								

QueryList: REACH-20th June 2016								
Query Res								
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH								
CategoryLevel_Name CategoryLevel_Threshold amount in product (mg) Application								

Naterial Composition Declaration						Mfr Item Name	BNZK*Z	67QD1Y				
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	1.522	mg	supplier	die	Silicon (Si)	7440-21-3		1.448	mg	951380	5792
				supplier	metallization	Aluminium (Al)	7429-90-5		0.009	mg	5913	36
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	657	4
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	1314	8
				supplier	metallization	Nickel (Ni)	7440-02-0		0.007	mg	4599	28
				supplier	metallization	Gold (Au)	7440-57-5		0.006	mg	3942	24
				supplier	Passivation	Silicon Oxide	7631-86-9		0.009	mg	5913	36
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	657	4
				supplier	back side metallization	Gold (Au)	7440-57-5		0.002	mg	1314	8
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.010	mg	6571	40
				supplier	polymer die coating	Durimide	proprietary		0.027	mg	17740	108
Leadframe & Clip	Copper and its alloy	89.812	mg	Supplier	alloy	Copper (Cu)	7440-50-8		89.768	mg	999510	359072
				Supplier	alloy	Zinc (Zn)	7440-66-6		0.004	mg	45	16
				Supplier	alloy	Iron (Fe)	7439-89-6		0.009	mg	100	36
				Supplier	alloy	Phosphorus (P)	7723-14-0		0.031	mg	345	124
Die Attach	Solder	4.277		JIG - R	soft solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	3.956	mg	924947	15824
				Supplier	soft solder	Tin (Sn)	7440-31-5		0.214	mg	50035	856
			mg	Supplier	soft solder	Silver (Ag)	7440-22-4		0.107	mg	25018	428
Encapsulation	Other organic material	152.251		Supplier	Moulding Compound	Amorphous Silica	7631-86-9		93.483	mg	614006	373932
				Supplier	Moulding Compound	Quartz	14808-60-7		30.450	mg	199999	121800
				Supplier	Moulding Compound	epoxy resin	25068-38-6		18.270	mg	119999	73080
			mg	Supplier	Moulding Compound	phenolic resin	29690-82-2		9.135	mg	60000	36540
				Supplier	Moulding Compound	Carbon black	1333-86-4		0.913	mg	5996	3652
Finishing	Solder	2.138		supplier	connection coating	Tin (Sn)	7440-31-5		2.138	mg	1000000	8552