



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 *	2016-08-31
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Floriana San Biagio	Representative Title	AMG 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

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
	B5V2*L296CA6	A	BO2A	2016-08-31
Amount	UoM	Unit type	ST ECOPACK Grade	
5592.00	mg	Each	ECOPACK® 1	
	Comment	ECOPACK® or ECOPACK® 1 is STMicroelectronics trade name for ROHS compliant devices		

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, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SVP	20x10.7x4.5	15	Through-hole	
Comment	Package: V2 MULTIWATT 15L SPLIT VERT.; MDF valid for L296			

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
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	BSV2*L296CA6					
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	9.662	mg	supplier	die	Silicon (Si)	7440-21-3		9.363	mg	969054	1674
				supplier	metallization	Aluminium (Al)	7429-90-5		0.116	mg	12006	21
				supplier	Passivation	Silicon Nitride	12033-89-5		0.040	mg	4140	7
				supplier	Passivation	Silicon Oxide	7631-86-9		0.053	mg	5485	9
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.007	mg	724	1
				supplier	back side metallization	Gold (Au)	7440-57-5		0.019	mg	1966	3
Leadframe	Copper & its alloys	4799.845	mg	supplier	back side metallization	Nickel (Ni)	7440-02-0		0.064	mg	6624	11
				supplier	alloy	Copper (Cu)	7440-50-8		4789.257	mg	997794	856448
				supplier	alloy	Iron (Fe)	7439-89-6		2.206	mg	460	394
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		4.028	mg	839	720
				supplier	metallization	Silver (Ag)	7440-22-4		4.354	mg	907	779
Soft solder	Other inorganic materials	8.914	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	8.691	mg	974983	1554
				supplier	solder	Silver (Ag)	7440-22-4		0.134	mg	15033	24
				supplier	solder	Tin (Sn)	7440-31-5		0.089	mg	9984	16
Bonding wires	Other inorganic materials	0.761	mg	supplier	wire	Copper (Cu)	7440-50-8		0.812	mg	1000000	145
				supplier	wire	Copper (Cu)	7440-50-8		0.812	mg	1000000	145
Encapsulation	Other Organic Materials	741.723	mg	supplier	mold compound	Silica, vitreous	60676-86-0		531.815	mg	716999	95103
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		126.093	mg	170000	22549
				supplier	mold compound	Phenol resin	9003-35-4		53.404	mg	72000	9550
				supplier	mold compound	Brominated epoxy resin	40039-93-8		11.126	mg	15000	1990
				supplier	mold compound	Antimony Trioxide	1309-64-4		14.835	mg	20001	2653
				supplier	mold compound	Bismuth	7440-69-9		2.225	mg	3000	398
connections coating	Solder	31.044	mg	supplier	mold compound	Carbon black	1333-86-4		2.225	mg	3000	398
				supplier	solder alloy	Tin (Sn)	7440-31-5		31.044	mg	1000000	5552