



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 *	2016-11-11
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giovanni Giacopello	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


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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
VND7140AJ12TR	ARWL*XV01BD5	A	SHENZHEN B/E	2016-11-11
	Amount	UoM	Unit type	ST ECOPACK Grade
	99.00	mg	Each	ECOPACK2

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

Package Designator	Size	Nbr of instances	Shape	
QFP	3.9-4.9-1.35	12	gull wing	
Comment	PowerSSO 12 monoframe			

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 :						Mfr Item Name	ARWL* XV01BD5					
note : Substance present with less 0.001mg will not be declared in this document												
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	2.564	mg	supplier	die	Silicon (Si)	7440-21-3		2.528	mg	985959	25535
				supplier	metallization	Aluminium (Al)	7429-90-5		0.004	mg	1560	40
				supplier	Passivation	Silicon Oxide	7631-86-9		0.010	mg	3900	101
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	391	10
				supplier	back side metallization	Gold (Au)	7440-57-5		0.004	mg	1560	40
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.017	mg	6630	172
Leadframe	Copper & its alloys	31.052	mg	supplier	alloy	Copper (Cu)	7440-50-8		29.188	mg	939972	294828
				supplier	alloy	Iron (Fe)	7439-89-6		0.687	mg	22124	6939
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.041	mg	1320	414
				supplier	alloy	Zinc (Zn)	7440-66-6		0.036	mg	1160	364
				supplier	metallization	Silver (Ag)	7440-22-4		1.100	mg	35424	11111
				supplier	metallization	Lead (Pb)	7439-92-1		2.438	mg	954955	24626
Soft solder	Solder	2.553	mg	JIG - R	solder	Lead (Pb)	7439-92-1		2.438	mg	954955	24626
				supplier	solder	Silver (Ag)	7440-22-4		0.064	mg	25069	646
				supplier	solder	Tin (Sn)	7440-31-5		0.051	mg	19976	515
Bonding wires	Other inorganic materials	0.229	mg	supplier	wire	Copper (Cu)	7440-50-8		0.229	mg	1000000	2313
Encapsulation	Other Organic Materials	61.607	mg	supplier	mold compound	Silica, vitreous	60676-86-0		53.228	mg	863993	537657
				supplier	mold compound	Epoxy Resin	25068-38-6		4.621	mg	75008	46677
				supplier	mold compound	Phenol Resin	29690-82-2		3.080	mg	49994	31111
				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		0.308	mg	4999	3111
				supplier	mold compound	Quartz	14808-60-7		0.185	mg	3003	1869
				supplier	mold compound	Carbon black	1333-86-4		0.185	mg	3003	1869
Connections coating	Solder	0.995	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.995	mg	1000000	10051