



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2015-11-30
Contact Name *	Refer to "Supplier Comment" section	Contact Title	Refer to "Supplier Comment" section
Contact Phone *	Refer to "Supplier Comment" section	Contact Email *	Refer to "Supplier Comment" section
Authorized Representative *	Emilio Castelli	Representative Title	APG 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/online_tech_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
VND5T100AJTR-E	AROT*VNX5AC3	A	BO2A	2015-11-30
Amount	UoM	Unit type	ST ECOPACK Grade	
115.50	mg	Each	ECOPACK® 1	

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, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
CHP	3.9x4.9x1.35	12	flat	
Comment				

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	false
Product(s) meets EU RoHS requirements except lead in solder and this usage may qualify under the lead in solder '7a' exemption (other selected exemptions may apply)	true
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
Product(s) is unknown, no information is available	false
Exemption Id.	Description

QueryList : REACH-16th June 2014				
Query				Response
The product 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	AROT*VNX5AC3					
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	4.639	mg	supplier	die	Silicon (Si)	7440-21-3		4.349	mg	937487	37654
Die				supplier	metallization	Titanium (Ti)	7440-32-6		0.144	mg	31041	1247
Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.026	mg	5605	225
Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.071	mg	15305	615
Die				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	647	26
Die				supplier	back side metallization	Gold (Au)	7440-57-5		0.008	mg	1725	69
Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.038	mg	8191	329
Leadframe	Copper & its alloys	67.197	mg	supplier	alloy	Copper (Cu)	7440-50-8		66.377	mg	987797	574693
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.031	mg	461	268
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.056	mg	833	485
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		0.733	mg	10908	6346
Die attach		3.910	mg	JIG - R	Soft Solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	3.734	mg	954987	32329
Die attach				supplier	Soft Solder	Silver (Ag)	7440-22-4		0.098	mg	25064	848
Die attach				supplier	Soft Solder	Tin (Sn)	7440-31-5		0.078	mg	19949	675
Bonding wire		0.395		supplier	wire	Gold (Au)	7440-57-5		0.103	mg	260759	892
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		0.292	mg	739241	2528
encapsulation		37.950	mg	supplier	mold compound	Silica, vitreous	60676-86-0		30.360	mg	800000	262857
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		2.657	mg	70013	23004
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		1.518	mg	40000	13143
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		2.277	mg	60000	19714
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		0.455	mg	11989	3939
encapsulation				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		0.569	mg	14993	4926
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.114	mg	3004	987
connections coating	Solder	1.410	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.410	mg	100000	12208