



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 *	2014-02-07
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
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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
VN5016AJTR-E	AR0T*VNC9CGC	A	BO2A	2014-02-07
Amount		UoM	Unit type	ST ECOPACK Grade
1115.00		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	4.9x3.9x1.55	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 '7b' 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 December 2013				
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	AR07*VNC9CGC					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die (s)	Other inorganic materials	5.173	mg	supplier	die	Silicon (Si)	7440-21-3		4.874	mg	942200	4371
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.137	mg	26484	123
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.029	mg	5606	26
die (s)				supplier	passivation	Indium Tin oxide (In2O3:SnO2)	50926-11-9		0.079	mg	15272	71
die (s)				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	580	3
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.009	mg	1740	8
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.042	mg	8119	38
Leadframe	Copper & its alloys	67.153	mg	supplier	alloy	Copper (Cu)	7440-50-8		66.333	mg	987789	59491
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.031	mg	462	28
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.056	mg	834	50
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		0.733	mg	10915	657
Die attach		4.307	mg	JIG R	glue or tape	Lead (Pb)	7439-92-1	7a-Lead in high me	4.113	mg	954957	3689
Die attach				supplier	glue or tape	Silver (Ag)	7440-22-4		0.108	mg	25075	97
Die attach				supplier	glue or tape	Tin (Sn)	7440-31-5		0.086	mg	19967	77
Bonding wire		0.532		supplier	wire	Gold (Au)	7440-57-5		0.067	mg	125940	60
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		0.465	mg	874060	417
encapsulation		1036.283	mg	supplier	mold compound	Silica, vitreous	60676-86-0		829.025	mg	799999	743520
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		72.540	mg	70000	65058
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		41.451	mg	40000	37176
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		62.177	mg	60000	55764
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		12.436	mg	12001	11153
encapsulation				JIG I	mold compound	Brominated Epoxy Resin	40039-93-8		15.545	mg	15001	13942
encapsulation				supplier	mold compound	Carbon black	1333-86-4		3.109	mg	3000	2788
connections coating	Solder	1.553	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.553	mg	1000000	1393