



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 *	2016-01-19
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
VND5E025ASTR-E	ARY7*VNQ2ACC	A	MU1A	2016-01-19
Amount		UoM	Unit type	ST ECOPACK Grade
400.00		mg	Each	ECOPACK® 1

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
3	245	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	7.5x10.3x2.5	16	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	ARY7*VNQ2ACC					
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	8.872	mg	supplier	die	Silicon (Si)	7440-21-3		8.430	mg	950180	21075
Die				supplier	metallization	Titanium (Ti)	7440-32-6		0.220	mg	24797	550
Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.040	mg	4509	100
Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.108	mg	12173	270
Die				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.004	mg	451	10
Die				supplier	back side metallization	Gold (Au)	7440-57-5		0.012	mg	1353	30
Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.058	mg	6537	145
Leadframe	Copper & its alloys	134.448	mg	supplier	alloy	Copper (Cu)	7440-50-8		128.478	mg	955596	321195
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		3.022	mg	22477	7555
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.182	mg	1354	455
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.158	mg	1175	395
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		2.608	mg	19398	6520
Die attach		6.303	mg	JIG - R	Soft solder	Lead (Pb)	7439-92-1	7a-Lead in high me	6.145	mg	974933	15363
Die attach				supplier	Soft solder	Silver (Ag)	7440-22-4		0.095	mg	15072	238
Die attach				supplier	Soft solder	Tin (Sn)	7440-31-5		0.063	mg	9995	158
Bonding wire		1.466		supplier	wire	Gold (Au)	7440-57-5		0.194	mg	132333	485
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		1.272	mg	867667	3180
encapsulation		244.537	mg	supplier	mold compound	Silica, vitreous	60676-86-0		195.630	mg	800002	489075
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		17.118	mg	70002	42795
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		9.781	mg	39998	24453
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		14.672	mg	59999	36680
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		2.934	mg	11998	7335
encapsulation				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		3.668	mg	15000	9170
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.734	mg	3002	1835
connections coating	Solder	4.375	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		4.375	mg	1000000	10938