



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 *	2015-01-09
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
VNH3SP30TR-E	ANLD*VNH3ABX	A	MU1A	2015-01-09
	Amount	UoM	Unit type	ST ECOPACK Grade
	1994.90	mg	Each	ECOPACK® 2

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	16x17.2x2	30	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	ANLD*VNH3ABX					
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	29.881	mg	supplier	die	Silicon (Si)	7440-21-3		28.921	mg	967873	14497
Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.188	mg	6292	94
Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.114	mg	3815	57
Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.201	mg	6727	101
Die				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.014	mg	469	7
Die				supplier	back side metallization	Gold (Au)	7440-57-5		0.043	mg	1439	22
Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.199	mg	6660	100
Die				supplier	glass coating	Glass: Silicon Dioxide (SiO2)	7631-86-9		0.201	mg	6727	101
Leadframe	Copper & its alloys	517.713	mg	supplier	alloy	Copper (Cu)	7440-50-8		511.602	mg	988196	256455
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.256	mg	494	128
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.410	mg	792	206
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		4.841	mg	9351	2427
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		0.574	mg	1109	288
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.030	mg	58	15
Die attach		22.602	mg	JIG - R	Soft Solder	Lead (Pb)	7439-92-1	7a-Lead in high me	22.037	mg	975002	11047
Die attach				supplier	Soft Solder	Silver (Ag)	7440-22-4		0.339	mg	14999	170
Die attach				supplier	Soft Solder	Tin (Sn)	7440-31-5		0.226	mg	9999	113
Bonding wire		8.074		supplier	wire	Gold (Au)	7440-57-5		0.857	mg	106143	430
Bonding wire				supplier	wire	Aluminium (Al)	7429-90-5		7.217	mg	893857	3618
encapsulation		1413.736	mg	supplier	mold compound	Biphenyl epoxy resin	85954-11-6		106.030	mg	75000	53151
encapsulation				supplier	mold compound	Phenol resin Novolak	26834-02-6		56.550	mg	40000	28347
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		1235.606	mg	874001	619382
encapsulation				supplier	mold compound	Carbon-black	1333-86-4		7.068	mg	5000	3543
encapsulation				supplier	mold compound	Bismuth (Bi)	7440-69-9		8.482	mg	6000	4252
connections coating	Solder	2.894	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.894	mg	1000000	1451