



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 *	2015-03-02
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

While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.


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
VND5E006ASPTR-E	AMFG*VH10AAJ	A	MU1A	2015-03-02
	Amount	UoM	Unit type	ST ECOPACK Grade
	1130.50	mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
3	225	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	7.5X9.3X3.3	16	pin	
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	AMFG*VH10AAJ					
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	24.442	mg	supplier	die	Silicon (Si)	7440-21-3		22.966	mg	939612	20315
Die				supplier	metallization	Titanium (Ti)	7440-32-6		0.603	mg	24671	533
Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.109	mg	4460	96
Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.296	mg	12110	262
Die				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.009	mg	368	8
Die				supplier	back side metallization	Gold (Au)	7440-57-5		0.029	mg	1186	26
Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.134	mg	5482	119
Die				supplier	glass coating	Glass: Silicon Dioxide (SiO2)	7631-86-9		0.296	mg	12110	262
Leadframe	Copper & its alloys	99.364	mg	supplier	alloy	Copper (Cu)	7440-50-8		96.348	mg	969647	85226
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.096	mg	966	85
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.029	mg	292	26
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		2.891	mg	29095	2557
Die attach		0.193	mg	supplier	tape	polyolefin	9003-07-0		0.061	mg	316062	54
Die attach				supplier	tape	epoxy resin	25068-38-6		0.122	mg	632124	108
Die attach				supplier	tape	Diphenol Propane Diglycidyl Ether	1675-54-3		0.010	mg	51813	9
Die attach 2		13.333	mg	JIG - R	Soft Solder	Lead (Pb)	7439-92-1	7a-Lead in high me	13.000	mg	975024	11499
Die attach 2				supplier	Soft Solder	Silver (Ag)	7440-22-4		0.200	mg	15000	177
Die attach 2				supplier	Soft Solder	Tin (Sn)	7440-31-5		0.133	mg	9975	118
Bonding wire		4.621		supplier	wire	Gold (Au)	7440-57-5		0.593	mg	128327	525
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		0.004	mg	866	4
Bonding wire				supplier	wire	Palladium (Pd)	7440-05-3		0.002	mg	433	2
Bonding wire				supplier	wire	Platinum (Pt)	7440-06-4		0.001	mg	216	1
Bonding wire				supplier	wire	Aluminium (Al)	7429-90-5		4.021	mg	870158	3557
encapsulation		983.584	mg	supplier	mold compound	Epoxy Resin	Proprietary		71.969	mg	73170	63661
encapsulation				supplier	mold compound	Phenol Resin	Proprietary		71.969	mg	73170	63661
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		829.090	mg	842927	733383
encapsulation				supplier	mold compound	Quartz	14808-60-7		2.879	mg	2927	2547
encapsulation				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		4.798	mg	4878	4244
encapsulation				supplier	mold compound	Carbon black	1333-86-4		2.879	mg	2927	2547
connections coating	Solder	4.397	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		4.397	mg	1000000	3889