Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2016-12-12
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 *	Antonella Lanzafame	Representative Title	AMG Materials Declaration 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/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 omprehensive 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
VNI4140K-32	A5V5*VP01BA3	A	MU1A	2016-12-12
	Amount	UoM	Unit type	ST ECOPACK Grade
	473.20	mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used o	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	7.0,7.0,0.9	44	flat	
Comment	V5 PowerSSO24.			

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)	false
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	**true**
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**
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

QueryList : REACH-20th June 2016	
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	A5V5*VP01BA3					
Homogeneous Material	**Material Group**	**Mass**	**UoM**	**Level**	**Substance Category**	**Substance**	**CAS**	**Exempt**	**Mass**	**UoM**	**Concentration in homogeneous material (ppm)**	**Concentration in product (ppm)**
SILICON DIE	Silicon die	9.331	mg	Supplier	Silicon die	Silicon (Si)	7440-21-3		8.604	mg	922088	18183
SILICON DIE				Supplier	die metallization	Titanium (Ti)	7440-32-6		0.225	mg	24113	475
SILICON DIE				Supplier	die metallization	Titanium Nitride (TiN)	25583-20-4		0.203	mg	21755	429
SILICON DIE				Supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.041	mg	4394	87
SILICON DIE				Supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.11	mg	11789	232
SILICON DIE				Supplier	backside metallization	Titanium (Ti)	7440-32-6		0.005	mg	536	11
SILICON DIE				Supplier	backside metallization	Gold (Au)	7440-57-5		0.012	mg	1286	25
SILICON DIE				Supplier	backside metallization	Nickel (Ni)	7440-02-0		0.058	mg	6216	123
SILICON DIE				Supplier	passivation	Gamma-butyrolactone	96-48-0		0.049	mg	5251	104
SILICON DIE				Supplier	passivation	Polyhydroxyamide	55295-98-2		0.022	mg	2358	46
SILICON DIE				Supplier	passivation	Alcoxysilane	Proprietary		0.001	mg	107	2
SILICON DIE				Supplier	passivation	Aryl Silicilic Acid	Proprietary		0.001	mg	107	2
LEADFRAME	Leadframe	161.395	mg	Supplier	alloy	Copper (Cu)	7440-50-8		155.375	mg	962700	328350
LEADFRAME				Supplier		Iron (Fe)	7439-89-6		3.741	mg	23179	7906
LEADFRAME				Supplier		Zinc (Zn)	7440-66-6		0.191	mg	1183	404
LEADFRAME				Supplier		Iron Phosphide (FeP)	26508-33-8		0.134	mg	830	283
LEADFRAME				Supplier		Silver (Ag)	7440-22-4		1.954	mg	12107	4129
DIE ATTACH	Die Attach	3.332	mg	JIG R	Lead/Lead Compounds	Lead (Pb)	7439-92-1	7a. Lead in high me	3.249	mg	975090	6866
DIE ATTACH				supplier	soft solder	Silver (Ag)	7440-22-4		0.05	mg	15006	106
DIE ATTACH				supplier		Tin (Sn)	7440-31-5		0.033	mg	9904	70
Bonding wire	Bonding wire	2.216	mg	supplier	Bonding wire	Gold (Au)	7440-57-5		2.216	mg	1000000	4683
ENCAPSULATION	Encapsulation	289.995	mg	supplier	Moulding Compound	Phenol Resin	205830-20-2		11.6	mg	40001	24514
ENCAPSULATION				supplier		Biphenyl epoxy resin	85954-11-6		8.7	mg	30001	18385
ENCAPSULATION				supplier		epoxy resin	Proprietary		8.7	mg	30001	18385
ENCAPSULATION				supplier		carbon black	1333-86-4		0.58	mg	2000	1226
ENCAPSULATION				supplier		Silica, vitreous	60676-86-0		260.415	mg	897998	550328
FINISHING	Finishing	6.931	mg	supplier	connection coating	Tin (Sn)	7440-31-5		6.931	mg	1000000	14647