



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 *	2015-09-03
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	Representative Title	IPD 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/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	<p>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.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
VIPER12ASTR-E	UCO7*VNA4XCB	A	SHENZHEN B/E	2015-09-03
Amount		UoM	Unit type	ST ECOPACK Grade
80.00		mg	Each	ECOPACK2

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	NiPdAuAg	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	4.9, 6, 1.75	8	GULL WING	
Comment	Package: SO 08 .15 JEDEC			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	true
2 - 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
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
5 - Product(s) is obsolete, no information is available	false
6 - Product(s) is unknown, no information is available	false
Exemption Id.	Description

QueryList : REACH-15th June 2015				
Query				Response
1 - Product(s) 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	UC07*VNA4XCB					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or Dies (choose)	Other inorganic materials	3.895	mg	supplier	die	Silicon (Si)	7440-21-3		3.781	mg	970732	47263
				supplier	metallization	Aluminium (Al)	7429-90-5		0.027	mg	6932	338
				supplier	Passivation	Silicon Nitride	12033-89-5		0.027	mg	6932	338
				supplier	Passivation	Silicon Oxide	7631-86-9		0.026	mg	6675	325
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	513	25
				supplier	back side metallization	Gold (Au)	7440-57-5		0.006	mg	1540	75
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.026	mg	6675	325
Leadframe	Copper & its alloys	32.000	mg	supplier	alloy	Copper (Cu)	7440-50-8		31.911	mg	997219	398888
				supplier	alloy	Iron (Fe)	7439-89-6		0.015	mg	469	188
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.027	mg	844	338
				supplier	metallization	Nickel (Ni)	7440-02-0		0.044	mg	1375	550
				supplier	metallization	Palladium (Pd)	7440-05-3		0.001	mg	31	13
				supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	31	13
				supplier	metallization	Silver (Ag)	7440-22-4		0.001	mg	31	13
Die attach	Other Organic Materials	1.344	mg	supplier	glue or tape	Silver (Ag)	7440-22-4		1.223	mg	909970	15288
				supplier	glue or tape	acrylate	Proprietary		0.067	mg	49851	838
				supplier	glue or tape	Methacrylate	Proprietary		0.054	mg	40179	675
Bonding wires	Other inorganic materials	0.117	mg	supplier	wire	Gold (Au)	7440-57-5		0.117	mg	1000000	1463
Encapsulation	Other Organic Materials	42.644	mg	supplier	mold compound	Silica, vitreous	60676-86-0		36.930	mg	866007	461625
				supplier	mold compound	Epoxy Resin	25068-38-6		3.198	mg	74993	39975
				supplier	mold compound	Phenol Resin	29690-82-2		2.132	mg	49995	26650
				supplier	mold compound	Carbon black	1333-86-4		0.213	mg	4995	2663
				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.171	mg	4010	2138