



## Materials Declaration Form

<b>IPC Form Type *</b>	1752 Distribute	<b>Version</b>	2
<b>Sectionals *</b>	Material Info Manufacturing Info	<b>Subsectionals *</b>	A-D <i>* : Required Field</i>

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2015-04-24
<b>Contact Name *</b>	Refer to "Supplier Comment" section	<b>Contact Title</b>	Refer to "Supplier Comment" section
<b>Contact Phone *</b>	Refer to "Supplier Comment" section	<b>Contact Email *</b>	Refer to "Supplier Comment" section
<b>Authorized Representative *</b>	Giovanni Giacobello	<b>Representative Title</b>	AMS & IPD Materials Declaration Champion
<b>Representative Phone *</b>	Refer to "Supplier Comment" section	<b>Representative Email *</b>	Refer to "Supplier Comment" section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/internet/com/support/online_tech_support.jsp">http://www.st.com/internet/com/support/online_tech_support.jsp</a>		

**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			
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	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
	NNQ7*MV61BC6	A	Z7GA	2015-04-24
Amount	UoM	Unit type	ST ECOPACK Grade	
150.00	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	
Not Applicable ; if coating is used	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	3.9,9.9,1.25	16	gull wing	
Comment	Package: SO 16 .15 TO JEDEC MS-012; MDF valid for VIPER16LD; VIPER16LDTR			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	true
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)	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-17th December 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	NNQ7*MV61BC6					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die (s)	Other inorganic materials	3.581	mg	supplier	die	Silicon (Si)	7440-21-3		3.517	mg	982128	23447
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.01	mg	2793	67
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.008	mg	2234	53
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.002	mg	559	13
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.017	mg	4747	113
die (s)				supplier	passivation	Gamma-butyrolactone	96-48-0		0.006	mg	1676	40
die (s)				supplier	passivation	Polyhydroxamide	55295-98-2		0.002	mg	559	13
die (s)				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	279	7
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.003	mg	838	20
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.015	mg	4189	100
Leadframe	Copper & its alloys	32.089	mg	supplier	alloy	Copper (Cu)	7440-50-8		31.145	mg	970582	207633
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.733	mg	22843	4887
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.044	mg	1371	293
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.038	mg	1184	253
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.117	mg	3646	780
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.004	mg	125	27
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.004	mg	125	27
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		0.004	mg	125	27
Die attach	Other inorganic materials	0.498	mg	supplier	glue or tape	Silver (Ag)	7440-22-4		0.406	mg	815261	2707
Die attach				supplier	glue or tape	Acrylate resins	7534-94-3		0.06	mg	120482	400
Die attach				supplier	glue or tape	Heterocyclic organic compound	3006-93-7		0.015	mg	30120	100
Die attach				supplier	glue or tape	Fluoroaliphatic Polymeric Esters	1017237-78-3		0.002	mg	4016	13
Die attach				supplier	glue or tape	Treated silica	Proprietary		0.015	mg	30120	100
Bonding wire	Other inorganic materials	0.213	mg	supplier	wire	Gold (Au)	7440-57-5		0.213	mg	1000000	1420
encapsulation	Other Organic Materials	113.619	mg	supplier	mold compound	Silica, vitreous	60676-86-0		100.78	mg	887000	671867
encapsulation				supplier	mold compound	epoxy resin	Proprietary		9.09	mg	80004	60600
encapsulation				supplier	mold compound	Phenol resin	Proprietary		3.409	mg	30004	22727
encapsulation				supplier	mold compound	carbon black	0		0.34	mg	2992	2267