



## 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>	2018-09-20
<b>Company Unique ID</b>	NL 008751171801		
<b>Contact Name *</b>	Refer to Supplier Comment section		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>	Floriana SAN BIAGIO	<b>Representative Title</b>	AMS MD 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/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**Uncertainty Statement**

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**Legal Statement**

<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	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
	KMQ7*MV4CADA	A	Z7GA	2018-09-20
Amount	UoM	Unit type	ST ECOPACK Grade	
150	mg	Each	ECOPACK® 2	
	Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant ( in each organic material)		

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	
Tin - 3.5Ag	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	3.9x9.9x1.25	16	flat	
Comment	Q7 SO 16 .15 TO JEDEC MS-012; MDF valid for VIPER0PLDTR			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
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
Exemption Id.	Description

QueryList : REACH-27th June 2018				
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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	KMQ7*MV4CADA				5000002.0	1000011.0				
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)				
Dies	M-011 Other inorganic materials	3.736	mg	supplier	die	Silicon (Si)	7440-21-3		3.601	mg	963865	24007				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.046	mg	12313	307				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	268	7				
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	268	7				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.015	mg	4015	100				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.039	mg	10439	260				
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	268	7				
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.001	mg	268	7				
				supplier	back side metallization	Gold (Au)	7440-57-5		0.006	mg	1606	40				
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.025	mg	6692	167				
				supplier	alloy	Copper (Cu)	7440-50-8		57.622	mg	958195	384147				
Leadframe	M-004 Copper and its alloys	60.136	mg	supplier	alloy	Iron (Fe)	7439-89-6		1.402	mg	23314	9347				
				supplier	alloy	Phosphorus (P)	7723-14-0		0.049	mg	815	327				
				supplier	alloy	Zinc (Zn)	7440-66-6		0.075	mg	1247	500				
				supplier	metallization	Nickel (Ni)	7440-02-0		0.477	mg	7932	3180				
				supplier	metallization	Palladium (Pd)	7440-05-3		0.010	mg	166	67				
				supplier	metallization	Gold (Au)	7440-57-5		0.006	mg	100	40				
				supplier	metallization	Silver (Ag)	7440-22-4		0.495	mg	8231	3300				
				Die attach	M-015 Other organic materials	0.191	mg	supplier	glue	exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl met	7534-94-3		0.141	mg	738220	940
								supplier	glue	1,1'-(1,3-phenylene)bis-1H-pyrrole-2,5-dione	3006-93-7		0.044	mg	230366	293
								supplier	glue	Epoxy resin	29690-82-2		0.003	mg	15707	20
								supplier	glue	2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane	3388-04-3		0.003	mg	15707	20
Bonding wires	M-008 Precious metals	0.103	mg	supplier	wire	Gold (Au)	7440-57-5		0.103	mg	1000000	687				
				supplier	mold compound	Epoxy resin A	29690-82-2		4.292	mg	50003	28613				
Encapsulation	M-015 Other organic materials	85.835	mg	supplier	mold compound	Epoxy resin B	Trade secret		1.717	mg	20003	11447				
				supplier	mold compound	Phenol resin	25068-38-6		1.459	mg	16998	9727				
				supplier	mold compound	Carbon black	1333-86-4		0.258	mg	3006	1720				
				supplier	mold compound	Silica fused	60676-86-0		78.109	mg	909990	520727				